

AN ANALYSIS OF THE CHARACTERISTICS OF FEMALE JUVENILE OFFENDERS AS  
PREDICTORS OF RESOCIALIZTION OR RECIDIVISM

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Because there has been a paucity of research on the educational needs of females with academic, behavioral, and emotional problems involved with the juvenile justice system, this study has been an attempt to classify and compare specific characteristics of this population. In particular, it examined their demographics, disability prevalence rates, along with academic, behavioral, and emotional functioning levels, in order to further understand their relationship to the resocialization or recidivism of the different groups of female juveniles incarcerated in the state of Texas, and contribute to the research for further developing successful prevention and intervention programs.

Various demographic factors of the female juveniles in this study were examined: (a) offender type, (b) county of commitment, (c) race/ethnicity, (d) age at first referral, and (e) English language proficiency. Prevalence rates of special education disabilities were determined. Academic functioning was measured by (a) IQ; (b) last school grade completed; (c) Test of Adult Basic Education (TABE) reading gain score; and (d) TABE math gain score. Behavioral functioning was indicated through (a) offense history, (b) documented behavior incidents, and (c) total risk score. Emotional functioning included *DSM-IV* diagnoses and treatment needs.

Due to the design of the research being a descriptive exploration, the findings produced this compilation of attributes. The population of study typically reached an education level of 8<sup>th</sup> grade or less before becoming incarcerated. Their IQ is usually in the range of 80 to 90 points, with their reading and math achievement levels lagging about five years behind those of their age group. Their gains in reading and math are usually two to three levels per year. The female

juveniles averaged 10 documented behavior incidents during their periods of incarceration. Their Global Assessment of Functioning (GAF) scores at intake showed they had moderate mental health symptoms and/or moderate difficulty in social, occupational, or school functioning. For this study population, there were almost twice as many recidivists as first-time offenders, and the findings showed that their characteristics, even those of different disability groups, were much more alike than different.

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Jan Elizabeth Aiello

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## CHAPTER 1

### INTRODUCTION

When undertaking a study on juvenile delinquency and youth crime within the United States, the research was found to be replete with examinations of multifarious issues surrounding the involvement of adolescent boys. The paucity of research concerning their female counterparts has been due to their lesser involvement as demonstrated by much lower percentages of arrests and commitments. However, within the last decade the Office of Juvenile Justice and Delinquency Prevention (OJJDP) has reported that “female involvement in the juvenile justice system, once seen as an anomaly, has evolved into a significant trend” (Budnick & Shields-Fletcher, 1998, p. 1). This chapter begins with an overview of issues related to the seriousness of their involvement as demonstrated by (a) increases reflected through juvenile justice statistics, (b) disability prevalence rates of the female juveniles involved, and (c) frequencies of mental health conditions with their accompanying implications. Then, a statement of the problem has been outlined, along with the purpose of the study and its rationale. Research questions are then presented, as well as the significance for the study and possible limitations. At the end of this chapter are definitions of terms which are pertinent to this research endeavor.

#### Juvenile Justice Statistics for Females

Across the United States, an alarming trend has developed in which female juveniles have accounted for over one quarter of all arrests of young people every year (Federal Bureau of Investigation, 2002). Further, noticeable differences had developed in the arrest trends for male and female juveniles by the end of the 20<sup>th</sup> century. For instance, arrest rates for male juveniles showed a definite decrease since 1992 in comparison to arrest rates increasing for female

juveniles by more than 18%, for which the largest increases were found to be for simple assault, drug abuse, and liquor law violations (Federal Bureau of Investigation, 2003). These particular offense categories have been shown to account for 28% of total arrests among female juveniles today. In 2001, female juveniles were found to be responsible for 18% of overall violent crime committed by juveniles and 16% of drug abuse violations, which indicated a 6% and 4% increase respectively since 1992. The highest increase of female juvenile arrests was found to be for drug abuse offenses at 200% since 1992 when compared to boys' 110% increase (Federal Bureau of Investigation, 2002).

Although a general decline in juvenile crime began in 1994, both the number and percentage of girls arrested, detained, and maintained in custody has continued to rise. In fact, the involvement of adolescent girls in the juvenile justice system has accelerated so much in recent years they have been identified as the fastest growing segment within the juvenile justice system (Acoca, 1999; American Bar Association and the National Bar Association, 2001; OJJDP, 1998a, 1998b; Veysey, 2003). The American Bar Association and the National Bar Association (2001) emphasized female offenders were the “fastest growing segment of the juvenile justice population, despite the overall drop in juvenile crime” (Barnett & Simmons, 2001, p. 1). The number of delinquency cases between 1989 and 1999 involving adolescent girls increased by 45 percent to an estimated 670,800 (American Bar Association and the National Bar Association, 2001). Of the 2.4 million arrests of juvenile delinquents in 2000, law enforcement agencies reported 28% involved a female offender (OJJDP, 2002). Between 1980 and 2000, the juvenile arrest rate for all offenses increased 35% for females and declined 11% for males (Snyder, 2002).

Furthermore, arrests of juvenile females increased more than male arrests in most offense categories, in particular that of violent crime offenses. Between 1993 and 1997, juvenile girls' arrest rates either increased at a faster pace or decreased less than that of boys in almost every types of offense category (Acoca, 1999). For example, the number of female juveniles arrested between 1989 and 1998 for Violent Crime Index offenses increased 64.3% in contrast to an 8.3% increase in arrests of male juveniles for the same offenses (Federal Bureau of Investigation, 1999). Female juveniles, aged 12 to 17, were reported to be increasingly involved in violent crimes ranging from assault and battery to murder charges (Prescott, 1998; Snyder & Sickmund, 1999; Veysey, 2003). In 2000, OJJDP reported 23% of female juveniles were arrested for aggravated assault and 31% for other assaults (Snyder, 2000). In addition, drug abuse violations for girls increased 190%, while boys increased 124%.

Clearly, female delinquency has become a growing problem. In 1996, there were 723,000 juvenile girls arrested, which represents a 106% increase over the 350,000 girls arrested in 1989. Additionally, there has been a consistent increase in the proportion of juvenile arrests that have involved girls over the past 40 years. Girls were counted as 11% of juvenile arrests in 1960, 15% in 1975, 21% in 1992, and 28% in 2000 (Girls Incorporated, 2002; Jenson, Potter, & Howard, 2001). Analysis of the future of juvenile crime suggested a 30% increase by the year 2010 (OJJDP, 2000). The increase of their involvement in the juvenile justice system has become a cause for societal concern with an urgent need to address the issues that contribute to this trend.

In the past, female juvenile offenders have not been considered a priority issue because most of them entered the system for status or other non-status offenses (i.e., liquor law violation, curfew violations, and truancy) (Chesney-Lind, 1999). Female juvenile delinquency was not considered to be true delinquent behavior, but a reflection of poor morals and rebelliousness

(Hoyt & Scherer, 1998). The majority of juvenile female arrests involved property crimes such as burglary and larceny-theft, and they appeared to be represented in greater numbers in “non-index” crimes such as status offenses rather than in violent crimes. Female juveniles who were aggressive and oppositional were often held to higher standards compared to males with similar behaviors (Girls Incorporated, 1996; Hoyt & Scherer, 1998; Poe-Yamagata & Butts, 1996). Consequently, female juveniles entering the juvenile justice system for minor offenses often received harsher consequences than their male counterparts (Hoyt & Scherer, 1998; Kempf-Leonard & Sample, 2000; Poulin, 1996).

In addition to increased involvement in the juvenile justice system by female juveniles, as well as them receiving harsher consequences, another problem appeared to be that of over-representation of minority females in detention facilities and jails. For example, in 1997, the total juvenile population consisted of 34% minorities, and of the juvenile females in residential placement for that same year, 51% were minorities. Similarly, the custody rate for non-Hispanic black females was higher than for other racial/ethnic groups, with it being three times higher the rate for non-Hispanic white females in most states (OJJDP, 1998a).

#### Disability Prevalence Rates

An over-representation of youth with disabilities exists in the juvenile justice system. Several studies have estimated the numbers to be anywhere from one-half to over two-thirds of this total juvenile population (McGarvey & Waite, 2000; National Center of Secondary Education & Transition, 2004). An extensive study conducted by the National Council on Disabilities (NCD, 2003), entitled *Youth with Disabilities in the Justice System*, specifically addressed their needs. Results of the NCD study showed that there exists high speculation

between the continuing failure of schools to properly implement the federal law (i.e., IDEA) and the increasing over-representation of youth with disabilities who become involved in the juvenile justice system.

A recent survey found that 37% of youth in state-run juvenile corrections facilities were identified as disabled. Of these youth with disabilities, 47% were identified as emotionally disturbed and 45% had specific learning disabilities (Rutherford, Quinn, Poirier, & Garfinkel, 2002b). Past studies have reported varied estimates of youth with disabilities in correctional facilities ranging from 20% to 42 % (Lewis, Schwartz, & Ianacone, 1988; Morgan, 1979; Rutherford, Nelson, & Wolford, 1985). Murphy (1986) reported the overall prevalence of youth with disabling conditions to be as high as 60%. Another study reported several reasons for these discrepancies in prevalence rates for youth with disabilities involved with the juvenile justice system (Rutherford, Bullis, Anderson, & Griller-Clark, 2002a). These included inconsistencies in defining disabling conditions, inadequate special education screening and assessment procedures, problems implementing special education programs in correctional settings, inadequate funding, failure to obtain prior school records, and administrative policies that place institutional security above education.

In addition to the problems associated with obtaining consistent prevalence estimates, some disorders and their symptoms have been found to significantly overlap (Dykman & Ackerman, 1991; Forness, Bennett, & Tose, 1983; Handwerk & Marshall, 1998; Kaplan, Dewey, Crawford, & Wilson, 2001). For instance, problems with overlapping disability conditions have occurred when a youth demonstrates both specific learning disabilities and emotional disturbance concurrently, or both learning disabilities and attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD) simultaneously (Kauffman, 1997; Wood & Lazzari,

1997). To further complicate this issue, youth whose primary disability meets criteria for other categories, like learning disabilities or emotional disturbance, are ineligible for classification under ADD or ADHD according to diagnostic criteria (Barkley, 1991). Therefore, accurately measuring prevalence of disabilities among youth involved in the juvenile justice system has become very difficult regarding the co-occurrence of ADD, ADHD, and other disorders. All in all, researchers have found that there are large numbers of youth with disabilities in juvenile justice facilities in need of special education services, and that this number is increasing (Bullock & McArthur, 1994; Rutherford et al., 2002a; Rutherford et al., 2000b).

The co-occurrence of disabilities has complicated the issues surrounding accurate diagnosis and proper intervention (e.g., medication, educational supports). The increased documentation of co-occurring disabilities has contributed to questioning the assumption that each disorder is a distinct clinical entity, independent of the others (Kaplan et al., 2001). This assumption of independence has served as the basis for categorical diagnostic decisions using criteria from the *Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> Edition (DSM-IV)* (American Psychiatric Association [APA], 1994) and P.L. 94-142, the Education of All Handicapped Children Act (1974). Therefore, the co-occurrence of disabilities within the individuals themselves has posed a diagnostic dilemma.

In the past, categorical diagnostic criteria have been used for prescribing and providing educational, behavioral, and medical treatments. The dimension for understanding youth as having only a single disability has become limited and static as this view denies the realities of daily living and functioning when conditions often overlap across a continuum of number, frequency, and severity of symptoms. Since the level of intervention has been dependent upon the severity of an individual's impairment, treating specific disorders with educational and

clinical protocols has not consistently proven to be optimally effective for individuals who demonstrate co-occurring disorders along with their variability of symptoms.

Studies have shown that students with learning disabilities (LD), emotional/behavioral disorders (EBD) and/or ADHD are at an even greater risk for negative future outcomes when their disabling conditions are combined with (a) demographic risk factors such as poverty, (b) deficient schooling, (c) inadequate health care, (d) exposure to domestic violence, (e) substance abuse, neglect, and (f) maltreatment (Boyce, Hoagwood, Lopez, & Tarullo, 2000; Ritner & Dozier, 2000). Additionally, such students receive lower grades, fail more often, are more likely to be placed in restrictive settings, and have the highest dropout rates (Knitzer, Steinberg, & Fleisch, 1990). Hence, the co-occurrence of disabilities has been shown to relate directly to the severity of their conditions.

#### Frequency of Mental Health Disorders

The juvenile justice system of today has been challenged by the demands for meeting the diverse needs of incarcerated juveniles. In 2001, juvenile justice residential placement facilities held more than 104,000 juvenile offenders (Sickmund, Sladky, & Kang, 2004). One of the largest needs in the juvenile justice system today has been determined to be that of understanding, identifying, and responding to the psychiatric disorders of juvenile detainees. It has been surmised that providing such youth with psychiatric services may be critical to breaking the cycle of recidivism (Teplin et al., 2006).

As the arrest and detention rates increased for female juveniles, national studies indicated that their physical, emotional, and mental health needs generally went unmet (Barnett & Simmons, 2001). Female juveniles have been cited as less successful than their male



counterparts in the area of transition from the juvenile justice system to school, due to lower self-esteem and greater family problems (Doren & Benz, 1998). They have been adversely affected by numerous life circumstances, including socioeconomic status, family support, education, use of drugs or alcohol, as well as a history of abuse (Conward, 2001). In 1993, the National Research Council on Child Abuse and Neglect (NRCCAN) reported that female adolescents were more likely to have been victims of sexual, emotional, and physical abuse which translates into their having higher rates of emotional and behavioral difficulties including increased incidences of depression, suicidal tendencies, and drug use. Similar findings stated that offenders who have been victims themselves tend to continue the cycle of violence (Soriano, Soriano, & Jimenez, 1994; Tolan & Guerra, 1994).

The Center for Mental Health Services (CMHS; 2001) reported that children and adolescents with mental, emotional, or behavioral health problems stayed in the juvenile justice system 5.7 times longer than other juveniles. Their estimates showed that 25% to 31% of these children had been abused and that 6% to 28% had previously attempted suicide. Another study reported that incarcerated girls experience higher rates of depression, make more attempts at suicide, and engage in self-mutilating behavior (Prescott, 1998). Since most detention facilities were designed for the predominantly male population, females placed in them usually did not receive medical and social services specific to their needs (Barnett & Simmons, 2001; Krisberg & Austin, 1993). Many times, females have been placed in detention for their own protection and end up spending more time detained waiting for an alternative placement on account of limited availability of rehabilitative housing options (Schaffner, Shick, & Stein, 1997).

The frequency of mental health problems among incarcerated adolescents has been determined to be much higher than in the general population (Edens & Otto, 1997). The most

common diagnosis has been that of conduct disorder while other youth exhibited high rates of co-morbidity with other emotional and behavioral disorders. In the case of substance abuse, co-morbidity was higher than the general population. As the research has gradually shifted during the past decade toward the arduous task of identifying the risk factors for increased female juvenile offending and for recidivism, attempts have been made to develop more specialized risk assessment instruments and gender-specific treatment approaches. Accordingly, research on the relationships among gender, risk factors, and delinquency has emerged as highly significant for examination in juvenile justice.

Furthermore, this review of literature revealed a *gender paradox* concerning relationships among gender, co-occurring disorders, and recidivism (Eme & Kavanaugh, 1995; Keenan, Loeber, & Green, 1999; Loeber & Keenan, 1994; Storvoll, Wichstrom, & Pape, 2002; Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001; Wasserman, McReynolds, Ko, Katz, & Carpenter, 2005). *Gender paradox* was indicative of the gender for which a condition is rarer often presenting with a more severe form of that condition. For instance, female adolescents identified as having conduct disorder, whose prevalence is less common than that of their male counterparts, demonstrated a wider range of correlated conditions, such as co-morbid disorders or family dysfunction. It was also found that female juveniles with particular diagnostic profiles are more likely to re-offend than their male counterparts.

Hence, psychiatric disorders have been a major health problem among detained youth, exacerbated by high rates of co-morbidity (Abram, Teplin, McClelland, & Dulcan, 2003). Among the disorders demonstrated by these youth, there were more instances of substance use plus ADHD or behavioral disorders than any other combination. Half were found to have an affective or anxiety disorder. It was also found that among these adolescent substance users,

internalizing disorders were associated with more severe substance use although they proved to have better outcomes (Henggeler, Pickrel, & Brondino, 1999). Accordingly, the issues of identification and management of substance use and behavioral problems among youth should be re-examined. Early intervention appeared to be critical since early onset of these disorders predicted poorer outcomes. Ultimately, psychiatric care has a chance to succeed where criminalization has not.

### Statement of the Problem

The increased involvement in the juvenile justice system by female juvenile offenders has lead to the development of more equitable services in a system primarily created from research based on male adolescent offenders (Sondheimer, 2001). Researching gender-specific risk factors for offending and recidivism in the female juvenile population has been crucial to understanding their rehabilitation process. The Juvenile Justice and Delinquency Prevention Act of 1974 and its amendments provided for gender-specific services to juvenile offenders while incarcerated. Hence, female-specific intervention approaches have been designed emphasizing differences between males and females, while advocating one intervention model for all females with some limited differentiation for females who differ from the norm (e.g., violent females; OJJDP, 1998b). However, there has been little change in the implementation of gender-specific treatment for female juvenile offenders.

Providing services to mentally ill young offenders has been hindered by financial constraints and policy boundaries even though the demand for mental health services for this population has been on the rise (Biggins & Oss, 2003). They stated the decline in funding being due to lack of parity for mental health in the medical system. In addition, Biggins and Oss

reported that approximately 50 to 75% of incarcerated youth had a diagnosable mental health disorder, and at least half of these experienced a co-occurring substance abuse problem. Between 9 and 13% of these juveniles had serious emotional disturbance, and at least 80% of all youth in the juvenile justice system met the criteria in the *DSM-IV* (APA, 1994) for a mental illness. Moreover, they reported that of the youth in detention and correctional facilities, the amount of suicides were four times greater than in the general population. White youth were more likely than African-American youth to have received mental health services previous to incarceration. Also, they stated that 60% of female juveniles were diagnosed with anxiety disorder in comparison to only 32% of male juveniles. In conclusion, Biggins and Oss proposed a greater use of wraparound services to save funding and allow for youths to receive services and treatment in the least restrictive environment.

### Purpose of the Study

In an attempt to determine what works for female juveniles with academic, behavioral, and emotional problems, this study explored the characteristics of female offenders incarcerated in the juvenile justice system in Texas. It focused on examining demographics and disability prevalence rates, along with certain academic, behavioral, and emotional functioning characteristics, in order to further understand their relationship to the resocialization or recidivism of the different groups of female juveniles incarcerated in the state of Texas. The findings from this study may encourage school and delinquency systems personnel to develop successful prevention and intervention programs by recognizing and responding more appropriately to the special needs of female juvenile offenders. Various demographic factors of the female juveniles in this study were: (a) offender type, (b) county of commitment, (c)

race/ethnicity, (d) age at first referral, and (e) English language proficiency. Prevalence rates of special education disabilities were determined. Academic functioning was measured by (a) IQ; (b) last school grade completed; (c) Test of Adult Basic Education (TABE) reading gain score; and (d) TABE math gain score. Behavioral functioning was indicated through (a) offense history, (b) documented behavior incidents, and (c) total risk score. Emotional functioning included *DSM-IV* diagnoses and treatment needs.

### Rationale

The problem with female-specific approaches for juvenile offenders has thus far centered around two factors: (a) the dearth of studies evaluating female-specific approaches in the juvenile justice system (OJJDP, 1998b) and (b) reliance on a juvenile justice system which has been based primarily on male-focused approaches to reduce the rate of recidivism among its female juvenile offenders. Since there has been a paucity of research on the educational needs of females with behavioral, emotional, and learning problems involved with the juvenile justice system, this study has been an attempt to classify and compare specific characteristics of this population. In particular, it examined their demographics, disability prevalence rates, along with academic, behavioral, and emotional functioning levels, in order to contribute to the research for further developing successful prevention and intervention programs.

### Research Questions

Five research questions lent themselves to exploration in this study.

1. What are the demographics of the population of female offenders incarcerated in the juvenile justice system in the state of Texas?

2. What are the prevalence rates of special education disabilities, as well as co-occurring disabilities, among female offenders incarcerated in the juvenile justice system in the state of Texas?

3. What are the academic functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas?

4. What are the behavioral functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas?

5. What are the emotional functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas?

### Significance of the Study

In the last decade, specifically, the empirical focus of research concerning adolescent females involved with the juvenile justice system has been on risk factors and pathways to offending for detained youth. In this study, we explored the effects of academic, behavioral, and emotional functioning factors of the incarcerated female juvenile population in relation to resocialization vs. recidivism. This understanding could assist in accurately determining the need for special education and mental health services in the juvenile justice system along with more specialized transition/aftercare services, thus aiding the system for proper budgeting for personnel and programs. This study could be helpful in determining which disabilities and mental health disorders among the female offenders should be considered for specific treatment

and for determining if risk for recidivism should be estimated differently based on the complexity of disabilities, delinquency, and mental health disorders present in the female juvenile delinquent population today.

Moreover, the increasing number of female youth with disabilities and mental health disorders incarcerated in juvenile justice facilities has brought attention to the need for public schools and community-based programs to begin what this researcher deems “detection prevention.” As research has been limited on effective education practices and outcomes for adjudicated youth (Nelson, Leone, & Rutherford, 2004), this study could expand the knowledge base for promoting higher levels of behavioral and emotional functioning in alignment with achievements in academic competence for this population, and thus provide a surer foundation for more successful transition/aftercare programming. Optimally, advanced screening and referral for special education services and mental health treatment specific to the needs of adolescent females at risk for delinquency involvement could be the key deterrent to their immersion in the juvenile justice system.

### Limitations

In an attempt to overcome the seeming reduction of accuracy of the study due to lack of use of a random sample from a larger population, this researcher instead sought to obtain as many records as available out of the entire population of female juveniles incarcerated by the juvenile justice system of Texas. The desired population was all female offenders incarcerated in the juvenile justice system in Texas since the latter part of 2003 when automated treatment assessment forms were instituted. The high number of this sample population served to counteract the lack of random selection. Another limitation for this study was that it only

examined data from the state of Texas, which limited the generalizability of the conclusions of the study.

For the purposes of this study, the definition of recidivist(s) referred only to those female juveniles with one or more prior placements. Those who have had no prior placements or adjudications in TYC have been designated as first-time offenders. The prediction of TYC youth recidivating in the future has been predicated upon examining the characteristics they possess. TYC defines recidivism by either rearrest or reincarceration, and they are able to track recidivism in the juvenile system, as well as into the adult system. Due to the time constraints for which data of interest has become available only in the last few years, this study of recidivism has compiled data exclusively on first time commitments. Many of these will have not yet been released and if so, may not have been released for very long; therefore, the likelihood of this same population of first-time offenders becoming recidivists is one limitation of this study. Consequently, distinguishing the female juveniles in TYC in this study as being either first-time offenders or recidivists has been based on their absence or incidence of prior placement(s).

### Definition of Terms

*Academic outcomes.* The positive outcomes of interactions between individuals and educational experiences, both individually and system-wide (National Center on Educational Outcomes, 1998).

*Affective/mood disorders.* Affective/mood disorders are characterized by a disturbance of mood and include depressive disorders and bipolar disorders. Within each of these categories are several related disorders. Depressive disorders are distinguishable from bipolar disorders as there



is no history of manic episodes in depressive disorders (Children's Law Center, Incorporated, 2001).

*Anxiety disorders.* Anxiety disorders include generalized anxiety, specific phobias, and physical symptoms associated with the cognitive and emotional experiences of anxiety. Post traumatic stress disorder and acute distress disorder specifically require the occurrence of a traumatic event for a diagnosis to be confirmed (Children's Law Center, Incorporated, 2001).

*Attention deficit hyperactivity disorder.* The current *DSM-IV* (APA, 1994) definition of ADHD will be used for this study, as it pertains to a condition manifested through three symptoms that comprise two behavioral dimensions of inattention and hyperactivity/impulsivity. The following conditions must have been present to warrant a diagnosis: (a) the level of impairment of these symptoms must have been present prior to the age of 7, (b) the symptoms must have been present for a number of years, and (c) they must have occurred in at least two settings (e.g., school and home). Additionally, the symptoms must have occurred often and severely enough to have caused significant impairment in the individual's daily functioning (e.g., academic and social). The hallmarks of ADHD include inattention such as difficulties concentrating, avoiding or disliking tasks requiring continued mental effort, and distractibility; hyperactivity-impulsivity such as fidgeting, talking excessively, and appearing always on the go; and impulsivity such as blurting out answers and interrupting. ADHD frequently co-exists with conduct disorder and oppositional defiant disorder, learning disorders, communication disorders, and anxiety disorders. Mood disorders are also more prevalent in youth with ADHD (Children's Law Center, Incorporated, 2001).

*Bipolar disorder (manic depressive disorder).* Bipolar disorders are characterized by manic, hypomanic, or mixed depressive-manic episodes. Manic episodes are an “abnormally and

persistently elevated, expansive, or irritable mood” (APA, 1994, p. 328). When the symptoms do not severely impair functioning, a hypomanic episode is diagnosed. Most individuals with bipolar disorder also have had major depressive episodes. Symptomatology for a manic or hypomanic episode includes decreased need for sleep, pressured speech, distractibility, and rapid changes in ideas or thinking. Adolescents often show psychotic symptomatology, rapid fluctuations in mood, or significant deterioration in functioning (Children's Law Center, Incorporated, 2001).

*Co-occurring disabilities.* For purposes of this study, the researcher will refer to overlapping disability conditions as co-occurring disabilities, such as when a youth demonstrates disabilities concurrently or in combinations, such as co-occurring LD/ED, ED/LD, LD/OHI, ED/OHI, and LD/ED/OHI.

*Co-morbidity.* Adolescents suffering from mental health disorders often have been found to suffer from more than one at the same time, which is commonly known as co-morbidity and is often the rule versus the exception among juvenile offenders. It is not uncommon for youth to be simultaneously diagnosed with conduct disorder, a learning disorder, and major depression or attention deficit/hyperactivity disorder (ADHD). Many times these youth present with co-occurring substance disorders as well (Boesky, 2002). For purposes of this study, the researcher will limit the term co-morbidity to refer to conditions, diagnosed by the *DSM-IV*, which occur simultaneously or in combinations.

*Conduct disorder.* According to the current diagnostic criteria in the *DSM-IV* (APA, 1994), conduct disorder has been defined as

[a] repetitive and persistent pattern of behavior in which either the basic rights of others or major age-appropriate society norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least

one criterion present in the past 6 months: aggression to people and animals, destruction of property, deceitfulness, and serious violations of rules. (pp. 90-91)

Conduct disorder is often co-morbid with ADHD, mood disorders, anxiety disorders, learning disorders, and substance abuse disorders (Children's Law Center, Incorporated, 2001).

*Delinquency offenses.* These are behaviors that would be criminal law violations for adults (Snyder & Sickmund, 2006).

*Disruptive behavior disorders.* Disruptive behavior disorders include conduct disorder and oppositional defiant disorder. The behaviors associated with each differ in level of severity and specific manifestation but can be characterized as disruptive and rule breaking in society, familial, and/or legal context (Children's Law Center, Incorporated, 2001).

*Diagnostic and Statistical Manual of Mental Disorders*, (4<sup>th</sup> ed.; *DSM-IV*). Manual widely used to classify mental disorders in most research studies and mental health facilities (APA, 1994). Mental health professionals use this manual when working with patients in order to better understand their illness and potential treatment. The *DSM IV* uses a multiaxial or multidimensional approach to diagnosing because rarely do other factors in a person's life not impact their mental health. It assesses five dimensions as described below:

1. Axis I: Clinical Syndromes – These are typically thought of as the diagnosis (e.g. depression, schizophrenia, social phobia).

2. Axis II: Developmental Disorders and Personality Disorders – Developmental disorders include autism and mental retardation, which are typically first evident in childhood. Personality disorders are clinical syndromes which have more long lasting symptoms and encompass the individual's way of interacting with the world. They include Paranoid, Antisocial, and Borderline Personality Disorders.

3. Axis III: Physical Conditions which play a role in the development, continuance, or exacerbation of Axis I and II Disorders – Physical conditions such as brain injury or HIV/AIDS that can result in symptoms of mental illness are included here.

4. Axis IV: Severity of Psychosocial Stressors – Events in a person's life, which can impact the disorders listed in Axis I and II, are both listed and rated for this axis.

5. Axis V: Highest Level of Functioning – On this final axis, the clinician rates the person's level of functioning from 0 to 100, both in order to understand how the above four axes are affecting the person and what type of changes could be expected. This score is based on the Global Assessment of Functioning Scale (GAF) and considers psychological, social, and occupational functioning on a hypothetical continuum of mental health-illness.

*Emotional disturbance.* According to the Individuals with Disabilities Education Act (IDEA) (1997), the federal definition for emotional disturbance (ED) is a condition exhibiting one or more of the following five characteristics over a long period of time and to a marked degree that adversely affects educational performance: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behaviors or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; or (e) a tendency to develop physical symptoms or fears associated with personal or school problems. The term does not include children who are socially maladjusted, unless it is determined that they have an emotional disturbance.

*Juvenile delinquency.* Juvenile delinquency is demonstrated as "a persistent pattern of anti-social rule breaking, or aggressive behavior, including defiance, fighting, bullying,

disruptiveness, explosiveness, and disturbed relations with peers and adults" (US Dept. of Education, 1998, pp. II-48).

*Learning disability.* According to the U. S. Department of Education (2002), a learning disability (LD) is defined as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculation, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

*Major depressive disorder and dysthymic disorder.* Major depressive disorder is characterized by one or more major depressive episodes, defined as a period of two weeks or longer “during which there is either a depressed mood or the loss of interest or pleasure in nearly all activities” (APA, 1994, p. 320). Dysthymic disorder tends to exhibit less severe but more chronic symptomatology but is more chronic (symptoms must be present for at least one year) (APA, 1994, p. 343). Adolescents often show irritability rather than a depressed mood, as well as exhibit more sleep and appetite problems, greater impairments, and suicidal ideation and attempts. Among adolescents, major depressive disorder is associated with the disruptive behavior disorders, ADHD, anxiety disorders, and substance-related abuse disorders. In particular, a high percentage of young people diagnosed with conduct disorder also have a dual diagnosis of depression (Children's Law Center, Incorporated, 2001).

*Oppositional defiant disorder.* Oppositional defiant disorder is defined in the *DSM-IV* as “a recurrent pattern of negativistic, defiant, disobedient, and hostile behaviors toward authority figures” (APA, 1994, p. 91). The behaviors are less severe than those seen in Conduct Disorder, but include frequently losing one's temper, often arguing with adults, defiance or refusing to

comply with rules, frequent anger, and deliberately annoying others (APA, 1994, pp. 93-94).

ADHD, learning disorders, and communication disorders are often co-morbid with oppositional defiant disorder (Children's Law Center, Incorporated, 2001).

*Post traumatic stress disorder (PTSD).* This condition is indicative of youth who have experienced, witnessed, or were confronted with an event that involved actual or potential death or serious injury putting them at risk for PTSD. The hallmarks of this disorder include (a) re-experiencing the traumatic event, such as through nightmares, flashbacks, and recurrent and intrusive distressing thoughts of the event; (b) persistent avoidance of stimuli associated with the traumatic event, such as avoiding activities, places or people associated with the trauma or inability to recall important aspects of the trauma; and (c) increased physiological arousal, including sleep difficulties, irritability and anger outbursts, as well as difficulty concentrating (APA, 1994). There is an increased risk of other anxiety disorders and major depressive disorders among individuals with PTSD (Children's Law Center, Incorporated, 2001).

*Resocialization.* Resocialization, a comprehensive rehabilitation program at the core of all TYC treatment programs, is designed to enhance personal accountability of delinquent youth and to give them the tools to become productive citizens. As youth advance through the program phases of academic/workforce, behavior, and correctional therapy, they learn to take responsibility for their actions and reject justification for continued delinquency (Texas Youth Commission, 2006a).

*Risk factor.* Risk factors are biological or psychological conditions that increase the probability of an individual developing problem behaviors (Hawkins, Catalano, & Miller, 1992; Werner & Smith, 1992).

*Schizophrenia and other psychotic disorders.* Psychotic symptomatology is the hallmark of schizophrenia, schizophreniform disorder, schizoaffective disorder, and brief psychotic episode. In the context of these disorders, “psychotic” refers to delusions, prominent hallucinations (e.g., visual, auditory), disorganized speech, or disorganized or catatonic behavior. A specific diagnosis of schizophrenia requires (a) the presence of psychotic symptomatology; (b) possibly negative symptoms such as a flat affect; (c) a marked decrease in functioning (e.g., school, social self-care); and (d) the presence of the signs having been manifested for at least six months. Schizophreniform disorder has similar symptoms but of shorter duration. A brief psychotic disorder is only present between 1 and 30 days. The incidence of schizophrenia can increase steadily during adolescence. Substance abuse and developmental delays often are co-morbid with schizophrenia (Children's Law Center, Incorporated, 2001).

*Status offenses.* Status offenses are behaviors that are not law violations for adults, but as considered illegal for juveniles, such as running away, truancy, violating liquor laws, and ungovernability (Snyder, & Sickmund, 2006).

*Substance-related disorders.* The substance-related disorders include disorders related to the taking of a drug of abuse (including alcohol), to the side effects of a medication, and to toxin exposure. Most of the substances can be grouped into 11 classes: alcohol; amphetamine or similarly acting sympathomimetics; caffeine; cannabis; cocaine; hallucinogens; inhalants; nicotine; opioids; phencyclidine (PCP) or similarly acting arlcyclohexylamines; and sedatives, hypmotics, or anxiolytics (APA, 1994, p. 175).

*Test of Adult Basic Education (TABE).* Norm-reference tests designed to measure achievement of basic skills commonly found in adult basic education curricula and taught in instructional programs (CTB McGraw-Hill, 2004).

*TONI-3: Test of Nonverbal Intelligence, Third Edition (TONI-3)*. Norm-referenced measure of intelligence, aptitude, abstract reasoning, and problem solving that is completely free of the use of language (Brown, Sherbenou, & Johnsen, 1997).



## CHAPTER 2

### REVIEW OF LITERATURE

For this review of literature on the academic, behavioral, and emotional, and characteristics of the female juvenile delinquent, searches were conducted through the Educational Resources Information Center (ERIC), Dissertation Abstracts International, National Criminal Justice Reference Service (NCJRS), and a hands-on search of pertinent journal articles and studies through the University of North Texas and over the Internet. The review of literature included studies and articles dating from 1950 to the present. The keywords employed for searches in this review included, but were not limited to: (a) juvenile justice, (b) special education, (c) juvenile delinquency, (d) female juvenile offenders, (e) recidivism, (f) gender-specific programming, (g) disabilities in juvenile justice, (h) emotional disturbance, (i) behavior disorders, (j) risk factors, and (k) at-risk youth. Further, these terms were used in combination in order to ensure the inclusion of any information pertinent to this review.

Studies concerning the issues surrounding female juvenile delinquency were limited in number, especially studies of prevalence rates of disabilities and mental health disorders among incarcerated female offenders. Additionally, the study of academic outcomes and their relation to successful transition for this population are limited, as are studies for risk assessment and gender-specific programming in deterring recidivism. The research presented in this chapter concentrated on (a) the historical perspective of female juvenile justice, (b) statistics for female juvenile offending, (c) characteristics of female juvenile delinquents, (d) risk factors, (e) disabilities among female juvenile offenders, (f) mental health disorders of female juvenile offenders, and (g) academic achievement and recidivism of female juveniles. Last, a summary was given of the findings from the literature reviewed.

## Historical Perspective of Female Juvenile Justice

Understanding the female juvenile began with studying the historical roots of female delinquency. The review produced few written accounts on the history of juvenile delinquency. Some researchers suggested that the paucity of research on the history of female juvenile delinquency pertained to the controversial gender-specific issues surrounding this population (Belknap, 1996; Chesney-Lind & Shelden, 1998; Mennel, 1982/1998; Schlossman & Wallach, 1978/1998). Belknap, Chesney-Lind and Shelden and Schlossman and Wallach stated that female juveniles received little attention due to their victimless crimes, wherein they were arrested for offenses that did not involve damage to property or people.

### *Parens Patriae*

During the 19<sup>th</sup> and early 20<sup>th</sup> centuries, the juvenile justice system for females was distinguished by the existence of reformatories and inequitable treatment of female juvenile delinquents. The most common characteristic associated with female delinquency was sexual activity or sexual promiscuity. The development of the juvenile justice system was based upon prevailing social standards of behavior for females; thus, consequences for females were often deemed contentious. The beginning of the juvenile justice system actually had its roots in the 15<sup>th</sup> century legal doctrine of *parens patriae*; which is the concept that the “state is the ultimate parent of all its children” (Chesney-Lind & Shelden, 1998; Feld, 1999a; Schwartz, 2001, p. 234). This concept allowed the state to intervene in the lives of youth by acting in the role of parent to protect, guide, and control, even though such intervention was presumed to maintain the prevailing social order (Chesney-Lind & Shelden, 1998; Krisberg & Austin, 1993; Schwarz, 2000).

The doctrine of *parens patriae* provided the basic philosophy and legal foundation for the Houses of Refuge, the first of which opened in 1824 in New York by the Society for the Reformation of Juvenile Delinquents with the intention of rehabilitation of children rather than punishment (Schwartz, 2000). Due to the downturn of the economy, the arrival of a new wave of Irish immigrants, changes in family structure, and growth of the factory system, this reformatory was opened to house the growing numbers of children living on the streets of the major eastern industrial cities, such as New York, Boston, and Philadelphia (Chesney-Lind & Shelden, 1998; Feld, 1999a; Krisberg & Austin, 1993; Schwartz, 2000). The opening of other houses of refuge followed with one in Boston in 1826, one in Philadelphia in 1828, and one in Baltimore in 1830. Between 1890 and 1899, reform schools were established in almost every state (Juvenile Justice FYI, 2004; Schwartz, 2001). The formation of reform schools resulted from a landmark decision by the Pennsylvania Supreme Court in 1838 in *Ex Parte Crouse*, which reflected the concept of *parens patriae* (state as parent or guardian) (*Ex Parte Crouse*, 1838). In this case, a justice of the peace from Pennsylvania had summarily committed a female juvenile, Mary Ann Crouse, to the Philadelphia House of Refuge based upon her mother's petition to the court that her daughter had become unmanageable. The girl's father attempted to have her returned to him by instituting a *writ of habeas corpus*; however, his request was denied as the court stated that

The object of charity is reformation, by training the inmates to industry; by imbuing their minds with principles of morality and religion; by furnishing them with means to earn a living; and above all, by separating them from the corrupting influence of improper associates. To this end, may not the natural parents, when unequal to the task of education, or unworthy of it, be superseded by the power of *parens patriae*, or common guardian of the community? (Chesney-Lind & Shelden, 1998; Feld, 1999a; Krisberg & Austin, 1993, p. 18)

Accordingly, *Ex Parte Crouse* established the right of the state for assuming the custody of a child, superseding the rights of parents, and utilizing institutionalization (usually for an

indeterminate period of time) as a method for the reform and rehabilitation of vagrant, delinquent, and unmanageable youth (Feld, 1999a; Krisberg & Austin, 1993). Hence, the exercise of authority by the justice system demonstrated that society had a responsibility for protecting the young juvenile offenders from becoming career criminals.

### Progressive Era

Around the late 1890s to the early 1920s, the Progressive Era took place in which the United States experienced unprecedented urban growth. The majority of the population moved from rural to urban areas, along with an influx of European immigrants seeking work in the industrialized cities. Even the social structure of cities was affected as the core areas became populated by the new urban poor, while the affluent moved outward due to increases in train and streetcar systems. Urban ghettos, formed by crowded populations of poor ethnic minorities, became a prevailing threat to social norms as crime and disorder surfaced among them. These types of problems quickly became associated with urban growth, in particular the populations of minorities occupying them. In addition, family structure had been impacted by the rural to urban migration in that the extended, close-knit agrarian family had been transformed to a more isolated, nuclear family structure. Children were working in factories at jobs not taken by immigrants, or they ended up without parental supervision while their parents worked at these low-paying jobs. Hence, a division arose between family and work, unlike it had been in their rural settings (Feld, 1999a; Krisberg & Austin, 1993).

However, the urban middle class experienced quite different changes in their family structure as opposed to the urban poor. Women of the urban middle class ended up staying home and caring for their own children while the men went off to work. Children of the urban middle

class did not become factory workers like the children of the urban poor; therefore they no longer were considered a part of the “family work force” as they had been on the farm. During this period of adaptation for families to their new social structures, along came studies in child development, the growth of the “child savers” movement, and the eventual creation of the juvenile court system separate from the courts for adults (Chesney-Lind & Shelden, 1998; Feld, 1999a). In essence “child savers” held the mindset indicative of this period as they promoted and acted upon the concept that the community bears the responsibility for taking care of its children and youth (Abrams, 2000).

Furthermore, during the Progressive Era, the theory of positivism or identifying causal factors in a person's life leading them to anti-social acts of crime and delinquency, was adopted by those promoting the rehabilitation of criminals and delinquents based upon a medical model of diagnosis and treatment. Positivism asserted that intervening on a case-by-case basis would change the behavior of an individual (Feld, 1999b). As a result, the first juvenile court was opened in Chicago in 1899 due to the vast economic and social changes such as those experienced in family structure, new roles for women, development of the child saver attitude, focus on child studies, and the momentum of positivism (Abrams, 2000; Krisberg & Austin, 1993). These courts heard cases of delinquency which might have included any infraction of a local ordinance, truancy, incorrigibility, or lack of parental supervision, and had the authority to send youth to a variety of institutions including reform schools, orphanages, or foster homes (Krisberg & Austin, 1993).

Prior to and during the Progressive Era, female delinquents were treated according to the society's attitudes toward women and expectations for their behavior. Even though the turn of the century brought many changes into the lives of girls and women, questions remained concerning

treatment of female juvenile offenders. Nationally, the focus of the juvenile justice system on female juvenile offenders centered on the application of *parens patriae* and a lower tolerance for their delinquency (Chesney-Lind & Shelden, 1998; Krisberg & Austin, 1993). The child saver's movement emphasized traditional family values and rights and responsibilities of families to supervise their children through imposing traditional, conservative moral standards of behavior on young women and girls, in particular, ethnic minorities and the poor (Alexander, 1995; Chesney-Lind & Shelden, 1998; Feld, 1999a; Knupfer, 2001). Ironically, they ended up contributing to the formation of a governmental system that limited the rights of parents by increasing the authority of government and the courts to intervene in the lives of children (Chesney-Lind & Shelden, 1998; Feld, 1999a; Knupfer, 2001).

During the Progressive Era, juvenile court records revealed that over 90% of females arrested were “moral offenders,” meaning anything from staying out past curfew to prostitution (Abrams, 2000; Chesney-Lind & Shelden, 1998). These females suffered much harsher consequences as they were twice as likely to be sentenced to training schools as their male counterparts (Chesney-Lind & Shelden, 1998). From 1900 to 1930, female juvenile offenders committed to reformatories in New York State had been guilty of prostitution and solicitation, incorrigibility and waywardness, disorderly conduct, and petty larceny (Alexander, 1995). The female juveniles tended to be “working class, immigrants, and African-American” (Alexander, 1995, p. 4). Overall, during this period in history, the juvenile justice system began to be affected by the interaction of race, gender, ethnicity, and social class among its detainees (Alexander, 1995; Feld, 1999a).

### *In re Gault*

Finally, the power of the juvenile courts was challenged in 1967 *In re Gault*, a case involving 15 year old Gerald Francis Gault who had been arrested for making obscene phone calls to a neighbor while on probation. Gerald appeared in an Arizona court before the arresting officer without notice of the charges pending or legal representation. This offense against an adult would have carried a penalty of not more than a \$50 fine or two months in jail; however, Gerald received a sentence to serve up to six years in a state industrial training school when he would turn an adult at the age of 21 or until he was discharged by due process of law (Juvenile Justice FYI, 2004). Such a sentence was not extended from a treatment or rehabilitative perspective. Henceforth, Gerald's attorneys appealed the decision by filing a *writ of habeas corpus* stating that juveniles were guaranteed due process according to the Fourteenth Amendment (Koroknay-Palicz, 2004). According to Koroknay-Palicz (2004), the U.S. Supreme Court ruled in his favor on the basis of the Fourteenth Amendment's guarantee of due process applied to children. In this ruling delivered by Justice Abe Fortas, children were granted the right to receive fair treatment, along with the following rights to minors (*In re Gault*, 1967): (a) the right to receive notice of charges, (b) the right to obtain legal counsel, (c) the right to confrontation and cross-examination, (d) the privilege against self-incrimination, (e) the right to receive a transcript of the proceedings, and (f) the right to appellate review. Consequently, *In re Gault* signified the beginning of the juvenile justice system as it is known today, as well as ensured the utilization of due process rights and privileges be afforded to juveniles as they are for adults (Juvenile Justice FYI, 2004; Koroknay-Palicz, 2004). Procedural reform and legislation were, thereafter, significantly impacted by this landmark decision.

## Social Changes of Latter 20<sup>th</sup> Century

In the 1960s and 1970s, more social change was brought about as civil rights and women's liberation movements came to the forefront. Rates of crime and delinquency escalated as cities became more densely populated by poor African-American families. Campus demonstrations occurred in protest against the Vietnam War (Feld, 1999b). It was during this time that the effectiveness of reform and training schools used by the juvenile justice system in treating and/or reducing juvenile crime and delinquency came into question. Juvenile courts struggled with a series of dichotomous concepts: “determinism versus free will, dependency versus responsibility, treatment versus punishment, welfare versus just deserts, discretion versus rule of law” (Feld, 1999b, p. 6). Calls for reforming the juvenile justice system resulted from the practice of severe treatment for juveniles and incarceration of youth, particularly for females in the instances of non-criminal or status offenses. Between 1950 and 1970, female juveniles charged with status offenses were treated more harshly than either male or female juveniles charged with more serious offenses (Chesney-Lind & Shelden, 1998).

Although Congress passed the Juvenile Delinquency Prevention and Control Act in 1968 for developing plans and programs at the state level to assist communities in discouraging juvenile delinquency (JDPCA, 1968), it was not until a report in 1973 by the National Advisory Commission on Criminal Justice Standards and Goals (1973) that significant changes were instigated. This report focused on the need for prevention of juvenile crime and delinquency through development of diversion programs and alternatives to incarceration. It also provided for due process for all juveniles, along with development of strategies to control the violent and chronic offender. Consequently, the Juvenile Justice and Delinquency Prevention Act (JJDP) of 1974 was created based on the previous report in 1973 with the intention of separating



juvenile and adult offenders and eliminating incarceration of status offenders (JJDP, 1974; Ohlin, 1998; Siegel & Senna, 2000). This act, and its subsequent re-authorizations, provided that states ensure protections to youth not only presently involved in the juvenile justice system but also to youth at-risk of juvenile delinquency. In addition, it required states to assess and address the disproportionate confinement of minority juveniles in all secure institutions (Building Blocks for Youth, 2003). Further, this law provided for the creation of The Office of Juvenile Justice and Delinquency Prevention (OJJDP), The Runaway Youth Program, and The National Institute for Juvenile Justice and Delinquency Prevention (JJDP, 1974).

### “Get Tough” Policies

With continuing increases in juvenile crime and delinquency, calls for “get tough” policies and practices resurfaced (Schwartz, 1989; Scott & Grisso, 1997; Zimring, 1998). Between 1979 and 1984, there was a 48% increase in the number of juveniles sent to adult prisons, and by 1985, two-thirds of training schools in the United States were overcrowded (Krisberg & Austin, 1993). In 1991, the OJJDP's report *Conditions of Confinement* indicated that 53% of detained youth were being held in facilities where population exceeded capacity. Also, the definition of status offense was revised so that the violation of a valid court order would be considered a delinquent offense and violators would become subject to incarceration (Chesney-Lind & Shelden, 1998). All in all, the juvenile justice system created over a hundred years ago to protect the legal rights of youth with its aim of deterrence from offending and subsequent incarceration, has instead evolved into an adult-like system where punishment overrides rehabilitation.

## Delinquency Prevention Efforts

Currently, the juvenile justice system has been experiencing a transformation as programs have been introduced for strengthening delinquency prevention efforts in the areas of after-school programs, truancy, and mentoring (e.g., Positive Education Program [PEP], Big Brothers Big Sisters of America [BBBSA], Juvenile Mentoring Program [JMP]) (Alliance for Children and Families, 2004; Howell, 2003). Also, legislation has been proposed for mandatory graduated sanctions programs being implemented by the states. Efforts such as these demonstrate a return to a focus on rehabilitation and provision of appropriate services to youth. Notwithstanding, the system of juvenile justice functioning today was formed from the complexities of punishment driven legislation of the past.

## Statistics for Female Juvenile Offending

Across the United States, an alarming trend has developed in which female juveniles have accounted for over one quarter of all arrests of young people every year (Federal Bureau of Investigation, 2002). Further, noticeable differences had developed in the arrest trends for male and female juveniles by the end of the 20<sup>th</sup> century. For instance, arrest rates for male juveniles showed a definite decrease since 1992 in comparison to arrest rates increasing for female juveniles by more than 18%, for which the largest increases were found to be for simple assault, drug abuse, and liquor law violations (Federal Bureau of Investigation, 2003). These particular offense categories have been shown to account for 28% of total arrests among female juveniles today. In 2001, female juveniles were found to be responsible for 18% of overall violent crime committed by juveniles and 16% of drug abuse violations, which indicated a 6% and 4% increase respectively since 1992. The highest increase of female juvenile arrests was found to be for drug

abuse offenses at 200% since 1992 when compared to boys' 110% increase (Federal Bureau of Investigation, 2002).

Although the rate of juvenile arrests for both juvenile males and females increased between 1983 and 1987, it continued to decline through 2002 (Snyder, 2004). Since 1983, the female rate increased more (72% vs. 30%) and then declined less (21% vs. 31%) than their male counterparts. However, the number of delinquent youth involved in the juvenile justice system has remained high. Although females represent the minority of all the juvenile offenders, the number of their arrests is increasing at an alarming rate (Acoca, 1999; American Bar Association and the National Bar Association, 2001; OJJDP, 1998b, 1998c; Siegel & Senna, 2000; Veysey, 2003). During the 1990s, female children and adolescents accounted for approximately 25% of the arrests made in the United States yearly (Chesney-Lind & Sheldon, 1998; Girls Incorporated, 1996; OJJDP, 1999). Between 1993 and 1997, the arrest rates of juvenile females either increased at a faster pace or decreased less than that of boys in almost every type of offense category (Acoca, 1999). In 2002, an estimated 2.4 million youth under the age of 18 were arrested by law enforcement agencies 28% of which were female juveniles (OJJDP, 2002; Snyder, 2002). In sum, the juvenile arrest rate for males had fallen to its lowest level in at least two decades in 2002, while the female arrest rate was still 36% above its 1983 low point (Snyder, 2004).

After reviewing the offenses for which female juveniles were arrested in the years 1920 and 1950, Odem and Schlossman (1991) found that in 1920, 93% were charged with status offenses, of which 65% were charged with “immoral” sexual activity. In 1950, 78% of the female juveniles were charged with status offenses, of which slightly more than 50% were charged with sexual misconduct. Additionally, female juveniles charged with status offenses

between the years of 1950 and the early 1970s received harsher consequences than their male and female counterparts who had committed more serious crimes such as felonies (Chesney-Lind, 1973; Gibbons & Griswold, 1957; Kratcoski, 1974; Odem, 1995).

Before the mid-1960s, government statistics did not include data on the female juvenile delinquent (OJJDP, 1998a). Due to the increase of “publicized” female delinquency through the media, measures were initiated by the government to begin tracking this trend (Chesney-Lind, 1979). In a Philadelphia cohort study of girls (Wolfgang, Figlio, & Sellin, 1972), female crime was found to be of a more minor, non-violent nature. Only 13% of the girls studied had participated in officially reported delinquency in comparison to 35% participation by boys (as cited in Facella, 1983). During the years between 1987 and 1991, reports revealed the number of females entering the juvenile justice system during early adolescence (13-14 years old) increased 10% (Bergsmann, 1994), along with a disproportionate representation among minority female juvenile offenders (Chesney-Lind, 1997; Chesney-Lind & Sheldon, 1998). This trend of increased female juvenile delinquency resulted in Congress instituting an amendment to the 1992 Juvenile Justice and Delinquency Prevention Act (JJDPA, 1992) to address the issues of gender and gender bias in the juvenile justice system and to provide for gender specific programming.

A study by Steffenmeier and Allan (1996) indicated that similarities existed in offending between men and women as well as gendered patterns of offending. They revealed that females are more likely to engage in minor property crimes than males, while males are more likely to engage in crimes against persons and major property crimes than females. During the year 1994, 678, 500 female juveniles accounted for one-quarter of all juvenile arrests made. Of that number, 57% of those females were arrested for status offenses (FBI, 1995). Furthermore, between 1992 and 1996 the number of juvenile females arrested increased 25% for violent crimes and 21% for

property crimes as compared to their male counterparts experiencing no increase in violent crimes and a 4% decrease in property crimes (Budnick & Shields-Fletcher, 1998).

Thus, not only has there been a consistent increase in the proportion of juvenile arrests that have involved females over the past 40 years, but also there has been increased involvement in violent crimes by this population (Prescott, 1998; Veysey, 2003). As a result, a need for a review of female delinquency along with a need for appropriate intervention became imminent. In 1994, the American Correctional Association (ACA) and the Office of Juvenile Justice for Delinquency Prevention (OJJDP) held a conference entitled, “A Time for Change.” Their focus was on the need for additional research in the areas of prevention, intervention, treatment, and follow-up for female juvenile delinquents. Consequently, interest in female juvenile delinquency has taken hold with studies in its etiology and methodology for gender-specific intervention (Belknap, 1996; Chesney-Lind & Sheldon, 1998; Sarri, 1995).

### Characteristics of Female Juvenile Delinquents

Although pathways into delinquency have not been proven to be similar, research has identified common characteristics of girls who do become involved in the juvenile justice system. As reported in Mullis, Cornille, Mullis and Huber (2004), current literature depicts the young female offender as (a) being 14 to 16 years old, (b) having grown up poor and in a high crime neighborhood, (c) likely to belong to an ethnic group, (d) from a poor academic history, (e) a drop out, (f) experiencing abuse or exploitation, (g) an abuser of drugs and/or alcohol, (h) having unmet medical and mental health needs, (i) feeling that life is oppressive, and (j) lacking hope for the future (Barnow, Schuckit, Lucht, Ulrich, & Freyberger, 2002; Dishion, Capaldi, & Yoerger, 1999; OJJDP, 1998b). Other characteristics of this population were that (a) many have

experienced either sexual or physical abuse, (b) many will be single heads of households dealing with issues accompanying their poverty and/or parenthood, and (c) many have low self-esteem with high incidence of suicidal behaviors (McCabe, Lansing, Garland, & Hough, 2002).

## Race

One significant commonality among female juvenile offenders has been that of belonging to an ethnic minority. While African American adolescent females accounted for only 12% of the general population, they made up 50% of the female juveniles involved in the juvenile justice system (OJJDP, 1998b). Bloom and Covington (2001) found that 65% of the at-risk population was composed of Caucasian girls, but only 34% of the total number of girls in the juvenile justice system were Caucasian. Additionally, custody rates appeared to vary significantly by race. In the United States, 234 African American females out of 100,000 adolescent girls are taken into custody for juvenile offenses as opposed to only 75 Caucasian girls per 100,000 total females. In addition, the custody rate for Native American/Alaska Native and Latina adolescent girls is disproportionately high as well (224 and 100 respectively out of 100,000 adolescent girls) (Girls Incorporated, 2002).

## Victimization

Another major characteristic of the female juvenile offender has been that of severe abuse. Prior traumatic victimization has been reported by a majority of girls in the juvenile justice system (e.g., physical, sexual, and/or emotional abuse) (Acoca, 1998; Acoca & Dedel, 1998; American Bar Association and the National Bar Association, 2001; Bloom & Covington, 2001; Girls Incorporated, 2002; Kendziora & Osher, 2004; OJJDP, 1998b; Veysey, 2003). Also,

females reported more instances of abuse prior to commitment than their male counterparts (Jenson, Potter, & Howard, 2001). Over 70% of female delinquents have reported experiencing physical or sexual abuse at some point in their lives (Kendziora & Osher, 2004; National Mental Health Association, 2004).

As a result, girls who have experienced such types of abuse have been shown to follow a pathway leading into delinquency. Young girls who have suffered abuse are almost twice as likely to be arrested as those who have not been abused (Bloom & Covington, 2001; Veysey, 2003). Another study linked experiences of physical, sexual, and emotional abuse in young girls to initial stages of delinquency and becoming involved with the juvenile justice system (Acoca, 1999). Moreover, victimization has also been shown to lead to Post Traumatic Stress Disorder (PTSD), which is an anxiety disorder that can develop after a traumatic experience, including physical and sexual abuse. It has been reported that approximately 50% of girls in the juvenile justice system meet the criteria for PTSD (Girls Incorporated, 2002; Kendziora & Osher, 2004; National Institute of Mental Health, 2004).

### Physical and Mental Health

Almost all females in the juvenile justice system suffered from some form of physical and/or mental health problems (American Bar Association and the National Bar Association, 2001; OJJDP, 1998b). Incarcerated female juveniles experienced mental health problems at much higher rates than their male counterparts (Kendziora & Osher, 2004; National Mental Health Association, 2004). Also, in comparison with male juvenile delinquents, female juveniles more often met the criteria for more than one disorder, especially a mental disorder with a substance abuse disorder (Veysey, 2003). Furthermore, their suicide attempts and self-mutilation

substantiated a major concern, as reports indicated that the environments of detention facilities can exacerbate these problems (National Mental Health Association, 2004). In addition, delinquent females often needed more medical attention than boys in that many have contracted difficult-to-treat sexually transmitted diseases and some enter the system pregnant (Beyer, 2001).

### Substance Abuse

Many girls in the juvenile justice system are characterized by drug and/or alcohol problems (OJJDP, 1998b). Prescott (1998) documented that the percentage of juvenile females in need of substance abuse treatment was between 60% and 87%. Many of these females indicated that self-medicated with drugs and/or alcohol as a means to avoid confronting their mental health disorders and painful past victimization (National Mental Health Association, 2004). Veysey (2003) revealed that among incarcerated female juveniles exhibiting depressive or anxiety symptoms, 79% had diagnosable substance abuse problems.

### Academics

Another common characteristic of female juveniles has been their poor school performance and propensity for dropping out of school altogether. It has been shown that large numbers of female juveniles have a history of academic failure (Acoca, 1999; American Bar Association and the National Bar Association, 2001, OJJDP, 1998b). Veysey (2002) identified poor academic achievement as the most immediate factor associated with criminal conduct in girls. Juvenile justice-involved females have been shown to be delayed in their academic development when compared with their peers, and as a result, end up falling through the cracks of the educational system. One study conducted of the California juvenile justice system revealed



that 85% of female delinquents had been either suspended or expelled at least once (American Bar Association and the National Bar Association, 2001; Beyer, 2001).

### Offense Type

A shared descriptor among female juveniles has been arrest for a status offense, which is usually their first contact with the juvenile justice system (Girls Incorporated, 2002). Typical status offenses committed by females involved running away, failure to attend school, violating liquor laws, and curfew violations (OJJDP, 1998c, Girls Incorporated, 2002). One report indicated that in 1999, 59% of juvenile arrests for running away involved females (Bloom & Covington, 2001). Hartwig and Myers (2003) revealed that girls were more often arrested for status offenses than boys by a 12 to 1 margin. In addition, one study pointed out that offense types and criminal activities tend to vary according to race. For example, in 1997, approximately 17 out of 100,000 African-American female juveniles committed murder and non-negligent manslaughter as opposed to about 3 out of 100,000 Caucasian female juveniles committing similar crimes (Porter, 2003).

### Additional Characteristics

A few more similarities were found to exist among the female juvenile population which when combined with the aforementioned contribute to an overall description of the typical delinquent female.

*Age.* Most adolescent females become involved with the juvenile justice system between the ages of 14 and 16 and have emerged from an impoverished, high crime neighborhood (OJJDP, 1998b).

*Family structure.* Family structure seemed to be another similarity among female delinquents. In 1997, more than 50% of all African American children were living with only one parent in comparison to approximately 30% of Latino children and 20% of Caucasian children in similar situations. It has been found that about 55% of African American incarcerated youth and nearly 50% of Caucasian incarcerated youth came from mother-headed households (Porter, 2003).

*Family fragmentation.* The type of family from which female delinquents develop has usually been fragmented. Many of the female juveniles have a history of being placed in multiple foster homes and often come into the system from a more fragmented family than do adolescent males (Ambrose & Simpkins; Beyer, 2001). One study found over 95% of female juveniles to be from unstable home environments (Acoca, 1999).

*Poverty.* Adolescent female delinquents who become involved with the juvenile justice system typically come from a family of lower socioeconomic status. One report showed that 75% of the girls participating in the PACE Center for Girls lived in low or very low-income areas (PACE Center for Girls Inc., 2003). Porter (2003) stated when race and income are examined together, African American adolescent females, who come from a low-income household, are the group most likely to be arrested. This is evidenced in their perspective that life is difficult; as a result, they have few expectations for their future (OJJDP, 1998b).

### Risk Factors for Delinquency

Risk factors identified in the literature across contexts have been used as predictors of problem behaviors as they are judged in terms of either symptoms or competence. The following were found to be characteristics associated with elevated probabilities of undesired outcomes

with regard to the study population. The following have been empirically identified across contexts as being risk factors for antisocial behavior among female adolescents (Mullis et al., 2004).

### Individual Characteristics

Individual characteristics cited as being risk factors for antisocial behavior among female adolescents (Mullis et al., 2004) included (a) impaired cognitive functioning and low academic achievement (Siegel & Senna, 2000), (b) weak language skills (Sanger, Hux, & Belau, 1997), (c) peer relationships (Katz, 2000), (d) onset of menarche (Lenssen, Doreleijers, & Dijk, 2000), (e) early sexual experiences (Lenssen et al., 2000), (f) mental illness (Acoca, 1999), (g) low self-esteem (Chesney-Lind & Shelden, 1998), (h) victimization (Acoca & Dedel, 1998), and (i) race/ethnicity (Siegel & Senna, 2000).

### Family Characteristics

Next, family characteristics cited as being risk factors for antisocial behavior among female adolescents (Mullis et al., 2004) were (a) parental disengagement and inattention in relation to their daughters (Acoca, 1999), (b) parental abuse (Katz, 2000), (c) emotional conflicts in families (Barnow et al., 2002), (d) intergenerational patterns of arrest and incarceration and family fragmentation (Acoca, 1999), (e) poverty (Loeber & Farrington, 1998), (f) family structure (Rantakallio, Myhrman, & Koironen, 1995), and (g) head of household education (Siegel & Senna, 2000).

### Peer Characteristics

In addition, peer characteristics cited in Mullis et al. (2004) as risk factors for antisocial behavior among female adolescents have been (a) peer influences such as associations with deviant peers (Dishion et al., 1999; Dishion, French, & Patterson, 1996), (b) involvement in intimate relations with peers (Siegel & Senna, 2000), (c) gang participation (Esbensen, Deschenes, & Winfree, 1999), (d) sexual harassment and interpersonal rivalries (Acoca, 1999), and (e) impulsivity and anger (Colder & Stice, 1998).

### School Characteristics

The school characteristics cited in Mullis et al. (2004) that were shown to be risk factors for antisocial behavior among female adolescents included (a) poor school performance (National Center for Education Statistics, 2000), (b) enrollment in co-ed schools (Ladd & Burgess, 2001), (c) lack of school attachment (Somers & Gizzi, 2001), (d) early occurrence of disruptive behavior in school (Ladd & Burgess, 2001), (e) low bonding to school and dropping out of school, (Chesney-Lind & Shelden, 1998), (f) expulsion from school (National Center for Education Statistics, 2000), (g) high absenteeism and frequency of school changes (Rumberger & Larson, 1998), and (h) limited involvement in extracurricular activities (Eccles & Barber, 1999).

### Community Characteristics

Finally, the risk factors cited at the community level for development of antisocial behavior among female adolescents (Mullis et al., 2004) included (a) urban versus rural residence (Archwamety & Katsiyannis, 1998), (b) early age at first arrest of female youth

(Kjelsberg, 1999), (c) distressed and disorganized neighborhood environments (Katz, 2000), (d) lack of social supports in the community (Siegel & Senna, 2000), and (e) disruption or lack of available activities for youth (Scales, Benson, & Leffert, 2000).

There are many factors which have contributed to female juvenile delinquency, and appeared to be associated in cross-contextual themes, such as the combination of poverty, family fragmentation, mental illness, school failure, and intergenerational patterns of arrest and incarceration (Acoca, 1999). It has been by developing an ecological framework that a more complete picture of the female juvenile offender emerged. By evaluating the circumstances and antecedents of their antisocial behavior according to the aforementioned risk factors, studies have been able to identify the factors or combinations thereof that may precede and/or maintain female juvenile offending.

#### Disabilities among Female Juvenile Offenders

Once again the word "default system" was found in the juvenile justice literature although this time it referred to the high rates of learning and behavioral disorders among incarcerated youth who can't read or write well, who have mental health problems, and who drop out of or are forced out of school (Nelson, 2000). Heretofore, a serious gap has existed between the number of youth with disabilities in the general population and those who are incarcerated. The Office of Special Education Programs (OSEP), a division of the U. S. Department of Education, reported in 2001 that the prevalence of disabilities among school-age children in the United States as 9%, while a conservative estimate of 32% was reported for the school-age population incarcerated within the juvenile justice system (Quinn, Rutherford, & Leone, 2001). The actual extent of over-representation and the mechanisms associated with it have not been definitively ascertained.

Estimated prevalence of disabilities among incarcerated youth has typically ranged from 30% to 70% (Casey & Keilitz, 1990; Murphy, 1986; Rutherford, Nelson, & Wolford, 1985). However, the reliability of these estimates was diminished due to (a) answers being provided by survey respondents, (b) limitations of geographic locations, and (c) ambiguous criteria for defining youth with disabilities. A dearth of empirical studies for the prevalence of disability rates among the female population was a limitation in this review.

Nevertheless, a study conducted recently from the mandatory annual census report to the Office of Special Education Programs at the U. S. Department of Education revealed the following as of December 1, 2000: (a) of the total 33,831 juveniles incarcerated, 81% were enrolled in an education program; (b) the number of incarcerated youth by state ranged from 30 to 7, 827, with a median of 509, of which 11.2 % were female and 88.8% were male; (c) the total number of incarcerated youth with disabilities receiving special education services was 8,613, with ranges of 23 to 1,605 eligible by state and the median being 160; and (d) the average prevalence rate of youth with disabilities in these state juvenile correctional systems was 33.4%, with state ranges from 9.1% to 77.5% and a median of 33% (Quinn, Rutherford, Leone, Osher, & Poirier, 2005).

Further, several explanations for the varying ranges of prevalence rates in past research studies among incarcerated youth were outlined in the literature. One explanation has been school failure, susceptibility, differential treatment, and metacognitive deficits (Quinn et al., 2005). It has been shown that learning, emotional/behavioral, and intellectual disabilities can directly or indirectly lead to "school failure," such as through school problems and failure producing negative self-image, which in turn can result in school dropout, suspension, and /or delinquency (Osher, Woodruff, & Sims, 2002). Second, it was proposed as a "susceptibility

theory" (Keilitz & Dunivant, 1987), that individuals with disabilities were predisposed to criminal or delinquent behavior through their manifestation of such personality and/or cognitive deficits as (a) poorly developed impulse control, (b) irritability, (c) suggestibility, (d) an inability to anticipate consequences, and (e) inadequate perception of social cues. Third, another explanation for inconsistent prevalence indicators pertained to "differential treatment" in so much as disabled and non-disabled delinquents were found to engage in similar behaviors, their assigned consequences frequently differed (Keilitz & Dunivant, 1987). Last, Larson (1988) proposed that "metacognitive deficits" were the determining factor behind the increased risk of delinquency and criminal behavior in youth with disabilities who were limited by less well developed problem-solving strategies than their more socially competent peers.

Quinn et al. (2005, p. 342) pointed out that "in all likelihood the number of students with disabilities in juvenile corrections compared to the number of youth incarcerated in juvenile corrections who are actually eligible for special education services is underestimated." Their study had demonstrated that of the estimated 33.4% of incarcerated youth with disabilities, the two largest categories of primary disabilities were "Emotional Disturbance" (47.7%) and "Specific Learning Disability" (38.6%), followed by (a) "Mental Retardation" (9.7%); (b) "Other Health Impairments" (2.9%); and "Multiple Disabilities" (0.8%). They pointed out that the variability in rates of identification and service delivery for this population may also be due to the fact that many youth with psychiatric needs have not been identified as being eligible for special education services. Studies revealed that this under-identification may have been indicative of differences between mental health and special education criteria (US Dept. of Education, 1998; Kendziora & Osher, 2004).

Other explanations could be attributed to schools having under-identified students due to

financial constraints or institutional incapacity to provide services. Reports showed that schools have avoided identifying students with antisocial behavior as a means to remove them by expulsion rather than have to qualify them and be forced to abide by their due process rights (Osher et al., 2002). This avoidance to identify may have employed the "social maladjustment clause," which can be used to exclude youth with conduct disorders from special education services (Gonzalez, 1991), if the youth do not meet the other IDEA eligibility requirements under the emotional disturbance classification (US Dept. of Education, 1998). Quinn et al. (2005) illustrated the significance of qualifying students with conduct disorders for special education services on the premise of it being the modal diagnostic category in children's mental health (Forness, 1992; Forness, Kavale, King, & Kasari, 1994; Sinclair & Alexson, 1992). Herein was found the dilemma: the diagnosis of conduct disorders and its considerable overlap with the characteristics of juvenile delinquency ("a persistent pattern of anti-social rule breaking, or aggressive behavior, including defiance, fighting, bullying, disruptiveness, explosiveness, and disturbed relations with peers and adults" [US Dept. of Education, 1998, pp. II-48]).

Girls who have met the criteria for conduct disorder have been shown to have a high risk of developing more severe psychopathology than their male counterparts (Jordan & Schlenger, 1996; Loeber & Stouthamer-Loeber, 1998; Ulzen et al., 1998). For girls with anti-social disorder who failed to receive treatment, their prognoses were not found to be favorable either. Bergsmann (1994) found that over half the girls committed to a state correctional facility had attempted suicide, with 64% reported they had tried more than once. Pajer (1998) reviewed 21 studies compare adult women on their antisocial traits as girls with their non-antisocial peers and found them to report higher rates of mortality, criminal behavior, psychiatric co-morbidity,



dysfunctional interpersonal relationships, poor educational attainment, and high rates of service utilization.

Also, the behavioral disorder ADHD has been reported as the condition most often co-occurring with delinquency (other than Conduct Disorder, which has significant overlap with delinquency) (Osher, Rouse, Quinn, Kendziora, & Woodruff with Firman, 2002). Where conduct problems are associated with underlying problems in emotion regulation, ADHD has been established as a genetically influenced disorder of the brain's behavioral inhibition system. Osher and colleagues contended that youth with ADHD are at increased risk for (a) academic problems, (b) antisocial behavior, (c) drug use/abuse, (d) academic dropout, and (e) depression. They went on to state that co-morbidity (the presence of multiple diagnoses) among troubled youth complicates service programs if youth are treated based upon some diagnostic label. Their proposal for best outcomes centered on youth receiving individualized, culturally competent assessment, and coordinated, family- and community-based services.

Recently, efforts have been made through legislation to ensure that juvenile correctional institutions provide a high-quality education to students with and without disabilities assigned to their facilities (Gagnon & Mayer, 2004). The Individuals with Disabilities Education Act (IDEA) (1997) and the No Child Left Behind Act (NCLB) (2001) are examples. The NCLB (2001) placed increased emphasis on monitoring student academic progress through assessment of academic outcomes. With the recent re-authorization of IDEA in 2004, schools "shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning" (Section 1414b). This revision should serve to alleviate the problems

which have been come about due to delaying intervention until the student's achievement is sufficiently low enough for the discrepancy measure to be met and due to identifying students at a later age when the academic problems are difficult to re-mediate even with the most intense remediation efforts (Torgesen, 2001). Further, this wait to fail model did not lead to closing the achievement gap for most students placed in special education for specific learning disabilities as they only showed minimal gains in achievement with only a few ever leaving special education (Donovon & Cross, 2002). In sum, the population of female juveniles with cognitive and other disabilities has been found to be over-represented in the juvenile justice system.

#### Mental Health Disorders of Female Juvenile Offenders

In 2001, juvenile justice residential placement facilities held more than 104,000 juvenile offenders (Sickmund, Sladky, & Kang, 2004). Research has well established that the majority of youth involved with the juvenile justice system have mental health disorders (Skowyra & Cocozza, 2006). Understanding, identifying, and responding to the psychiatric disorders of juvenile detainees has been determined to be one of the largest demands put upon the juvenile justice system today. Accordingly, it has been surmised that providing such youth with psychiatric services may be critical to breaking the cycle of recidivism (Teplin et al., 2006). To address the needs of such youth, justice officials need to know the kinds of disorders that are most common and their prevalence among juvenile detainees.

The President's *New Freedom Commission Report on Mental Health* (2003) revealed that Americans with mental illness deserve excellent care and emphasized the importance of working across child-serving systems to meet the needs of youth with mental health problems interfacing with the juvenile justice system. This report revealed that 50-75% of youth in juvenile detention

and correctional facilities have diagnosable, untreated mental disorders (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). A study by Coccozza and Skowrya (2000) found that at least one out of every five youth in the juvenile justice system has a serious mental health disorder. Studies have demonstrated that anywhere from 65% to 70% of youth in the juvenile justice system meet the criteria for a diagnosable mental health disorder (Shufelt & Coccozza, 2006; Teplin et al., 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002; Wasserman, Ko, & McReynolds, 2004).

Furthermore, a recent study by Shufelt and Coccozza (2006) reported that approximately 25% of youth experience disorders so severe that their ability to function is significantly impaired. The National Center for Mental Health and Juvenile Justice conducted a multi-state mental health prevalence study on youth in three different types of juvenile justice settings. Over 70% of youth were found to meet criteria for at least one mental health disorder. The most common was disruptive disorders, followed by substance use disorders, anxiety disorders and mood disorders. It was shown that the majority of youth had multiple diagnoses with over 90% who were diagnosed with conduct disorder also meeting the criteria for another disorder (Shufelt & Coccozza, 2006).

The U. S. Department of Health and Human Services revealed in the *Report of the Surgeon General's Conference on Children's Mental Health* (2000) that the juvenile justice system has become the *default* mental health system, particularly for minority and economically disadvantaged youth. Since the de-institutionalization of the mental health system, the reliance on justice systems for care of the mentally ill has steadily increased (Teplin et al., 2002). Grisso and Barnum (2000) reported rates of mental illness to be substantially higher in the juvenile justice system than those detected in the general population. Also, rates of psychiatric disorder

for youth in juvenile justice settings have been higher than that of youth in community samples and comparable to youth in clinical settings (National Mental Health Association [NMHA], 1999; Otto, Greenstein, Johnson, Friedman, & Coccozza, 1992). Murphy (2003) stated that every year, 110,000 children and youth are held in juvenile detention and correctional facilities all over the United States. Between 55, 000 and 82,500 of those have diagnosable mental health illnesses that interfere with their daily functioning. Boesky (2002) reported that a large number of juvenile offenders are “sick kids in need of treatment.”

Furthermore, in the annual report of the Coalition for Juvenile Justice (2000), titled *Handle With Care: Serving the Mental Health Needs of Young Offenders*, it was revealed that 73% percent of youth in juvenile facilities reported mental health problems during screening; 57% had previously received treatment; 55% had symptoms associated with clinical depression; 50% had conduct disorders; up to 45% had attention-deficit hyperactivity disorders (ADHD); and many had multiple diagnoses. More than half of these youth with psychological disorders were also experiencing a substance abuse disorder.

It has been stated that a major concern for youths in the juvenile justice system has been the level of untreated mental health problems. A study by Kataoka et al., (2001) stated that between 1981 and 2001, there was a 103% increase (four times more than for males) in the arrest rate of female juveniles. They pointed out that without mental health treatment these adolescent females often demonstrated considerable neuropsychological and social impairments into adulthood. In addition, the level of internalized disorders related to depression and anxiety were clinically more common among this population. Even though their study sample only involved 54 incarcerated females ages 14-to-18-years-old, they found that 80% warranted an evaluation for an emotional or substance abuse disorder.

Veysey (2003) indicated that a majority of female juveniles met the criteria for at least one mental disorder, and in some studies, their rates of prevalence were higher than that of boys. Timmons-Mitchell et al., (1997) reported a prevalence of identified mental health disorders in 84% of the female juvenile offenders compared to 27% of male juvenile offenders. Teplin and colleagues (2002) found that 74 % of girls compared to 66 % of boys met the criteria for a current mental disorder. Studies have confirmed that adolescent females: (a) experienced more mental illness than did non-delinquent adolescent female and delinquent males (Prescott, 1998; Steinberg & Avenevoli, 2000), (b) attempted suicide more frequently (Chesney-Lind & Shelden, 1998), and (c) engaged in early sexual experimentation (Acoca, 1999).

Accordingly, serious delinquency has been described as a multidimensional disorder, and research on the origins and factors that contribute to the stability of problem behaviors over time, found a correlation with internal traits or characteristics (Mullis et al., 2004). Miller (1995) cited Fejes-Mendoza and Miller's (1992) description of the emotional, educational, and interpersonal correlates of dependency behaviors, such as a lack of problem-solving skills and avoidance of challenges, as impeding adolescent females in their process of developing healthy psychological and emotional functioning. They suggested that this hindrance on healthy development increases the probability of their becoming involved with the juvenile justice system.

Moreover, their lives have been seriously affected by sexual and physical abuse which has become known to significantly contribute to involvement in drug use and other delinquency behaviors (Dembo, Williams, & Schmeidler, 1993; Siegel & Senna, 2000). Studies have revealed a high rate of sexual abuse history among female delinquents (Funk, 1999; Dembo et al., 1993; McCabe et al., 2002). In 1993, the National Research Council on Child Abuse and Neglect (NRCCAN) reported that female adolescents were more likely to have been victims of sexual,

emotional, and physical abuse which translates into their having higher rates of emotional and behavioral difficulties including increased incidences of depression, suicidal tendencies, and drug use. Similar findings stated that offenders who have been victims themselves tend to continue the cycle of violence (Soriano, Soriano, & Jimenez, 1994; Tolan & Guerra, 1994).

The National Council on Crime and Delinquency (NCCD) (1999) conducted a study of girls in the California juvenile justice system and found that they had experienced high incidences of victimization, including physical, sexual, and emotional abuse, and reported that sexually abused adolescent females have serious problems with self-image, sexual attitudes, family relations, vocational and educational goals, and mastering their environment, thereby increasing their risk for delinquent behavior (Acoca & Dedel, 1998; Siegel & Senna, 2000).

The Center for Mental Health Services (2001) reported that children and adolescents with mental, emotional, or behavioral health problems stayed in the juvenile justice system 5.7 times longer than other juveniles. Their estimates showed that 25% to 31% of these children had been abused and that 6% to 28% had previously attempted suicide. Another study reported that incarcerated girls do experience higher rates of depression, make more attempts at suicide, and engage in self-mutilating behavior (Prescott, 1998). Since most detention facilities were designed for the predominantly male population, the females placed in them usually did not receive medical and social services specific to their needs (Barnett & Simmons, 2001; Krisberg & Austin, 1993). Many times, females have been placed in detention for their own protection end up spending more time detained waiting for an alternative placement on account of limited availability of rehabilitative housing options (Schaffner, Shick, & Stein, 1997).

The most common diagnosis has been that of conduct disorder while other youth exhibited high rates of co-morbidity with other emotional and behavioral disorders. In the case of

substance abuse, co-morbidity was higher than the general population. As the research has gradually shifted during the past decade toward the arduous task of identifying the risk factors for increased female juvenile offending and for recidivism, attempts have been made to develop more specialized risk assessment instruments and gender-specific treatment approaches. Accordingly, research on the relationships among gender, risk factors, and delinquency has emerged as highly significant for examination in juvenile justice.

Furthermore, studies have indicated that the incidence of co-occurring disorders has been high among female delinquents. Even with the dearth of empirical studies focusing on the mental health needs of female juveniles, there has been evidence of gender differences in prevalence rates and types of mental disorders. This review of literature revealed a *gender paradox* concerning relationships among gender, co-occurring disorders, and recidivism (Eme & Kavanaugh, 1995; Keenan, Loeber, & Green, 1999; Loeber & Keenan, 1994; Storvoll, Wichstrom, & Pape, 2002; Tiet, Wasserman, Loeber, McReynolds & Miller, 2001; Wasserman, McReynolds, Ko, Katz, & Carpenter, 2005). *Gender paradox* was indicative of the gender for which a condition is rarer often presenting with a more severe form of that condition. For instance, female adolescents identified as having conduct disorder, whose prevalence is less common than that of their male counterparts, demonstrated a wider range of correlated conditions, such as co-morbid disorders or family dysfunction.

In addition to the *gender paradox*, another study revealed an important paradox regarding race/ethnicity (Teplin et al., 2002). It was demonstrated that of the detained youth in the juvenile justice system being African American or Hispanic, more than half presented with psychiatric disorders. However, Teplin and colleagues found the prevalence of many disorders to be highest among non-Hispanic whites, which reflects that white youth in the juvenile justice system may,

on average, be more dysfunctional than minority youth (e.g., have greater psychiatric morbidity).

In 1998, Ulzen, Psych, & Hamilton found that 82% of girls met the criteria for two or more disorders compared to 58 % of boys. Randall, Henggler, Pickrel, and Brondino (1999) conducted a study of co-morbidity of substance abuse/dependence with a second psychiatric diagnosis and found that virtually all females (99%) met criteria for co-morbidity compared to only 69% of their male counterparts. Similarly, Kataoka (2001) found that 80% of incarcerated female juveniles exhibited symptoms of a mental or substance use disorder with 79% having a co-occurring substance abuse problem in addition to clinically significant depressive or anxiety symptoms. It was revealed that this population tended to have high rates of major depression; anxiety disorders, including post-traumatic stress disorder (PTSD); somatization disorders; and borderline personality disorders (Dembo et al., 1993; Richards, 1996; Rohde, Mace, & Seeley, 1997; Timmons-Mitchell et al., 1997; Ulzen et al., 1998).

Hence, histories of physical and sexual abuse among the female juvenile population have resulted in significant and long lasting mental health problems leading to self-harming behaviors and involvement in status offenses and delinquency (Veysey, 2003). The following sequelae were revealed: (a) suicide attempts (Miller, 1994; Rhode et al., 1997); (b) depression and anxiety disorders (Davis, 1997; Prescott, 1998); (c) running away (Calhoun, Jurgens, & Chen, 1993; Chesney-Lind & Shelden, 2004); and (d) increased likelihood of future sexual assault, rape (Gruber, 1984; Levine & Kanin, 1987), prostitution (Calhoun et al., 1993), property offenses, drug sales (Rhodes et al., 1997), substance abuse/dependency, and arrests for violent crime (Widom & Maxfield, 2001). As a result, psychiatric disorders have become a major health problem among detained youth, exacerbated by high rates of co-morbidity (Abram, Teplin, McClelland, & Dulcan, 2003).



## Academic Achievement and Recidivism of Female Juveniles

Overall, there has been a dearth of juvenile justice studies on the academic functioning of incarcerated female youth. However, studies on incarcerated juvenile delinquents in general have demonstrated significant problems in many intellectual and academic performance areas. Their intellectual functioning has been found to be within the low-average to average range, while academic achievement levels ranged from fifth- to ninth-grade levels. When compared with non-delinquent peers, incarcerated youth demonstrated significant deficits in reading, math, written, and oral language. In addition, studies reveal that the intellectual and academic functioning levels on non-recidivists are significantly high than those of recidivists for this population. Furthermore, incarcerated youth appeared to share the common experience of school failure (Foley, 2001).

Moreover, female juveniles were found to have completed significantly fewer grades in school, making their educational and job-skills needs more profound than those of their male counterparts (Timmons-Mitchell et al., 1997). Girls have more negative attitudes toward school and school failure than boys which have demonstrated to be a powerful predictor for delinquency (Harris, 1998). In a study of female juvenile repeat offenders in Duval County, Florida, it was shown that school failure (i.e., truancy, suspension, poor grades, or expulsion) was the most statistically significant risk factor for delinquency (Acoca, 2000), and these girls appeared to have been most likely to experience school failure during pre- and early adolescence (Acoca & Dedel, 1998). Acoca (2000) reported histories of school suspension for 39% of the case files reviewed and 90% of the female juveniles interviewed. Also, 25% of girls interviewed needed special education services and 36% of the case files reviewed reflected special education needs.

Studies on incarcerated youth show that juvenile delinquents appeared to function within

below-average to average levels of intelligence with documented mean Full Scale IQ scores of 80 to 100 (Archwamety & Katsiyannis, 1998; Beebe & Mueller, 1993; Katsiyannis & Archwamety, 1999; Mesinger, 1976). Mesinger also reported a broader range of intellectual functioning ranging from above-average to below-average levels. In addition, some studies found a frequently observed pattern in the intellectual functioning of these youth to be that of higher Performance IQ s than Verbal IQ s (Ollendick, 1979; Rincker, Reilly, & Braaten, 1990). They reported the average verbal-performance discrepancy to be 8 to 12 points. Rincker and colleagues found the average discrepancy was 7.51 for young men and 13.69 for young women.

Archwamety and Katsiyannis (2000) examined the records of 505 delinquent males (ages 12-15) during a 7-year period (1991-1997, inclusive) to study the intellectual functioning of incarcerated adolescents receiving remedial reading or math instruction. They found that the Verbal, Performance, and Full Scale IQ scores of youth in the remedial math group were significantly lower than those of the youth in the remedial reading group, and the youth in the remedial reading group scored significantly lower than youth not receiving remedial instruction. Additionally, differences were found to exist among groups of incarcerated young men classified as either recidivists or non-recidivists. The non-recidivist group had significantly higher Verbal IQ s than the recidivists, but showed no significant differences for Performance IQ s (Katsiyannis & Archwamety, 1999). Among groups of young women recidivists and non-recidivists, there appeared to be no significant differences noted for Verbal, Performance, or Full Scale IQ scores (Archwamety & Katsiyannis, 1998).

In the area of academic functioning, studies have consistently shown incarcerated youth to be one year to several years below expected grade levels (Beebe & Mueller, 1993; Fejes-Mendoza, Miller, & Eppler, 1995; Fejes-Mendoza & Rutherford, 1987; Rincker, Reilly, &

Braaten, 1990). For women, studies showed their academic functioning levels to range between fifth- and ninth-grade levels (Fejes-Mendoza & Rutherford, 1987; Rincker et al., 1990). It appeared that incarcerated juveniles classified as non-recidivists functioned at an academically higher level than recidivists. Young male non-recidivists demonstrated significantly greater than young male recidivists on standardized measures of basic academic skills (e.g., reading, writing, math, applied knowledge, skills; Katsiyannis & Archwamety, 1999). Young female non-recidivists demonstrated high math achievement scores than did young female recidivists (Archwamety & Katsiyannis, 1998).

On the whole, Archwamety and Katsiyannis (2000) found that members of the remedial groups were twice as likely to be recidivists or parole violators as members of the non-remedial group. Their study indicated that cognitive factors seem to be the most important predictors of group membership. The fact that verbal IQ predicts academic remediation better than performance IQ underscores the importance of language. The race factor was found to be second, and the background and institutional factors (i.e., recidivism, parole violation, age at first offense, and age at first commitment) were third. Their study established that gains in academic achievement have an inverse association to recidivism. It appeared that individuals with academic deficits experienced a host of other factors that have been associated with recidivism for which correctional facilities need to intensify and expand efforts in addressing the needs of those individuals. The Katsiyannis and Archwamety study (2000) advocated supports such as programs in chemical dependency, abuse, vocational training, and social skills training.

### Summary

All in all, the female adolescents involved with the juvenile justice system were found to

comprise a particularly vulnerable group requiring early identification and intervention to alter their course and prevent further development of their problem behaviors. While they were found to be the fastest growing segment of the juvenile justice system, another alarming statistic appeared to be the high rates of mental health disorders among them. Some documented rates exceeded 80% while many of these females exhibited co-occurring substance use problems. Their juvenile delinquent behavior has been linked to a number of factors, the most significant being (a) behavioral and learning disabilities, (b) mental health disorders, (c) dropping out of school, (d) substance abuse, (e) family history, and (f) poverty. Moreover, the involvement of these female adolescents in delinquency not only results in substantial needs, the difficulties of which often become exacerbated upon incarceration in the juvenile justice system.

Therein lies the responsibility of the justice, behavioral health, and educational agencies to work together to provide this population with comprehensive screening and assessment and treatment services which attend to their unique needs in an integrated and continuous manner. Additionally, these agencies must provide more unified and effective “detection prevention” to assure that this population does not fall through the cracks between systems or points along their educational and juvenile justice-related experiences. This research will contribute to the knowledge base for developing earlier identification practices and appropriate treatment services in hopes of interrupting the ongoing cycle of violence and crime for which this population has far too often been victimized.

In conclusion, Elias, Zins, Graczyk, and Weissberg (2003) wrote about the daunting challenges and possible solutions to improve the outcomes for students with mental health needs in order to convey a “deeper understanding of the interrelationship between academic and social-emotional learning” (p. 304). Hanley (2003) stated the interpretation thereof for this

understanding as a fundamental perspective that may be often overlooked in traditional therapeutic models. He referred to the access to reinforcement in schools being largely determined by academic reinforcement. Further, academic performance not only leads to strongly associated types of reinforcement, such as test scores and grades, but it has also been shown to determine access to social reinforcement as well, such as high regard among peers and teachers. Hanley further pointed out that a rival and negative set of contingencies can also occur through lack of academic success suppressing further academic pursuit, reducing self-esteem, and driving a student to greater affiliation with other students who have been “turned off” to this central objective of schooling.

Current policy and practice in the United States have placed increased emphasis on empirically supported interventions and evaluation. The National Association of School Psychologists (NASP) has partnered with Office of Special Education Programs (OSEP) on efforts to reform education for students with or at risk of emotional and behavioral disorders. The impetus behind promoting the interrelationship between academic and social-emotional learning as proposed by Elias et al. (2003) was to instigate support for the parallel development of mental health and cognitive achievement in students. Through such efforts to direct and implement effective programs aimed at the integration of social-emotional and academic development of children and youth at all levels of the educational and juvenile justice system, it is hoped that all administrators, educators, professionals working with these youth will be convinced that this is the best approach for all students and the only way to assure that no child, including those with academic, behavioral, and emotional problems will ever be left behind.

## CHAPTER 3

### METHODOLOGY AND PROCEDURES

In this exploratory descriptive analysis pertaining to the serious involvement by female youth involved in the juvenile justice system in Texas, specific relationships were examined pertaining to their disabilities, as well as academic, behavioral, and emotional functioning levels. This chapter begins with the purpose of the study followed by the research questions of focus. Then, a description of the subjects studied is given, along with the instrument and procedures utilized. Finally, procedures for data are presented.

#### Purpose of the Study

In an attempt to determine what works for female juveniles with academic, behavioral, and emotional problems, this study explored the characteristics of female offenders incarcerated in the juvenile justice system in Texas. It focused on examining demographics and disability prevalence rates, along with certain academic, behavioral, and emotional functioning characteristics, in order to further understand their relationship to the resocialization or recidivism of the different groups of female juveniles incarcerated in the state of Texas. The findings from this study may encourage school and delinquency systems personnel to develop successful prevention and intervention programs by recognizing and responding more appropriately to the special needs of female juvenile offenders. Chapter 3 outlines the methods by which the following variables of interest in this study were examined, and the results for which are given in Chapter 4. Various demographic factors of the female juveniles in this study were: (a) offense history, (b) county of commitment, (c) race/ethnicity, (d) age at first referral, and (e) English language proficiency. Prevalence rates of special education disabilities were

determined. Academic functioning was measured by (a) IQ; (b) last school grade completed; (c) Test of Adult Basic Education (TABE) reading gain score; and (d) TABE math gain score. Behavioral functioning was indicated through (a) offender type, (b) documented behavior incidents, and (c) total risk score. Emotional functioning included *DSM-IV* diagnoses and treatment needs.

### Research Questions

Based upon the literature review, five research questions have guided this study.

1. What are the demographics of the population of female offenders incarcerated in the juvenile justice system in the state of Texas?
2. What are the prevalence rates of special education disabilities, as well as co-occurring disabilities, among female offenders incarcerated in the juvenile justice system in the state of Texas?
3. What are the academic functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas?
4. What are the behavioral functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas?
5. What are the emotional functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas?

## Description of Subjects

This study used data accrued by Texas Youth Commission (TYC) on female juvenile offenders incarcerated by the state of Texas since the latter part of 2003, which is when the use of automated treatment forms were first instituted. The case files of these female juveniles typically included: (a) intake/orientation forms; (b) personal identification and social history forms; (c) medical and mental health screening forms; (d) running record and staff observation forms; (e) school data; (f) court orders; and (g) resocialization phases data. After receiving permission to conduct this investigation from the Director of Research for TYC, the study was approved by the Institutional Review Board at the University of North Texas. Data used in this study represented a sample of 822 female youth between the ages of 11 and 18 from all geographic areas within the state of Texas. The female juveniles having disabilities and mental health disorders had been formally evaluated and identified by TYC and/or another Texas education facility or state agency. TYC accepts pre-commitment diagnoses of disability from any public school system in the state. Formal evaluations are completed on an “as needed” basis by examining the youth's re-evaluation needs or when TYC has not received all required assessments from the youth's home school, so as to be in compliance with state requirements for meeting and continuing eligibility for special education services and treatment programs. The director of research sent the requested data directly to the researcher through emails with Excel file attachments. In order to protect the confidentiality of these subjects, the director sent the data with coded identification numbers only to avoid revealing the personal identification of the individuals under study.

The youth sent to TYC are the state's most serious or chronically delinquent offenders. In fiscal year 2005 (9/04 – 8/05), 33% of new arrivals had committed violent offenses, which was



the same percentage as in fiscal year 2004. The percentage of new arrivals categorized as high risk offenders was 38% (TYC, 2006b). In addition, statistics for all TYC youth, including both boys and girls, from fiscal year 2005 pertaining to this study were as follows: (a) 10% were girls; (b) median age at commitment was 16; (c) 43% were Hispanic; (d) 33% were African-American; (e) 23% were Anglo; (f) median reading and math achievement level was 5<sup>th</sup> grade (five years behind their peers); (g) 40% of combined population were identified as eligible for special education services; (h) 10% were limited English proficient (LEP); (i) 81% had IQs below the mean score of 100; (j) 39% had a high need for drug treatment; and (k) 36% had severe mental health problems.

## Resocialization

Because TYC is the state's juvenile correctional agency, it is treatment-based. Most youth committed to TYC are not given an actual sentence, because they are prosecuted in the juvenile system becoming adjudicated delinquent for their offenses and therefore civilly committed to TYC. They can stay legally in TYC custody up until their 21<sup>st</sup> birthdays. Sometimes a judge will give a youth what is called a determinate sentence meaning up to forty years for very serious offenses. Youth with determinate sentences go to TYC to demonstrate they are capable of being rehabilitated. If they are unable to demonstrate rehabilitation, then they may be transferred to the adult system to serve out the remainder of their sentences. Hence, the mission of TYC is twofold: to protect the public and to rehabilitate the youth in its custody, which is determined through accountability and rehabilitation through resocialization (TYC, 2006a).

Resocialization is the comprehensive rehabilitation program serving as the core of all

TYC treatment programs. It is designed so that youth may advance through three different program phases of (a) Academic/Workforce Development, (b) Behavior, and (c) Correctional Therapy, as they learn to take responsibility for their actions and reject justification for continued delinquency (TYC, 2006a). As it is progressive and competency-based, this program means that youth move gradually from high restriction confinement to aftercare or parole, based on their completion of both their minimum lengths of stay and a demonstrated mastery of objectives.

Each phase of the resocialization program has specific individualized objectives based upon the medical, psychological, and academic testing and evaluation each youth receives upon admittance to TYC. Youth are assessed monthly in each level of the phases of Academic/Workforce Development, Behavior, and Correctional Therapy (ABC), and only progress as they complete specific objectives in accordance with their abilities. Only through compliance with program rules and completion of the resocialization phases may a youth earn rewards and privileges. They begin on phase A-0, B-0, and C-0 and are eligible for parole when they reach phase A-4, B-4, and C-4 and complete their minimum lengths of stay (i.e., 9, 12, or 24 months, or turn 21 years old). The program of resocialization focuses on (a) personal responsibility for behavior, (b) self-control, (c) academic achievement according to ability, (d) vocational and social skills development, and (e) restitution to victims and the community. The goal of resocialization is to instill within the juvenile offender new norms, rules, and expectations for behavior that enables them to meet their needs without violating the rights of others; all the while, the delinquent youth learn new socialization patterns through participation in a program that is (a) respectful of cultural differences, (b) validates the reality of their life

experiences, and (c) helps them reintegrate into the community as productive citizens (TYC, 2006a).

## Recidivism

For the purposes of this study, the definition of recidivist(s) referred only to those female juveniles with one or more prior placements. Those who have had no prior placements or adjudications in TYC have been designated as first-time offenders. The prediction of TYC youth recidivating in the future has been predicated upon examining the characteristics they possess. TYC defines recidivism by either rearrest or reincarceration, and they are able to track recidivism in the juvenile system, as well as into the adult system. Due to the time constraints for which data of interest has become available only in the last few years, this study of recidivism has compiled data exclusively on first time commitments. Many of these will have not yet been released and if so, may not have been released for very long; therefore, the likelihood of this same population of first-time offenders becoming recidivists is one limitation of this study. Consequently, distinguishing the female juveniles in TYC in this study as being either first-time offenders or recidivists has been based on their absence or incidence of prior placement(s).

## Description of Instrument

Background information for this study was abstracted from the justice records and other juvenile data was obtained from intake records and documentation maintained while in the TYC system, with the identification of subjects coded for protection of confidentiality. Various demographic factors of the female juveniles in this study were examined: (a) offender type, (b) county of commitment, (c) race/ethnicity, (d) age at first referral, and (e) English language

proficiency. Prevalence rates of special education disabilities were determined. Academic functioning was measured by (a) IQ; (b) last school grade completed; (c) Test of Adult Basic Education (TABE) reading gain score; and (d) TABE math gain score. Behavioral functioning was indicated through (a) offense history, (b) documented behavior incidents, and (c) total risk score. Emotional functioning included *DSM-IV* diagnoses and treatment needs.

For the purposes of this study, measurements of IQ were included. One instrument utilized was the TONI-3: Test of Nonverbal Intelligence, Third Edition (TONI-3), a norm-referenced measure of intelligence, aptitude, abstract reasoning, and problem solving that is completely free of the use of language, was used for IQ assessment (Brown, Sherbenou, & Johnsen, 1997). It is completely nonverbal and largely motor-free, requiring only a point, nod, or symbolic gesture to indicate response choices. It is particularly well suited for individuals who are known or believed to have disorders of communication or thinking such as aphasia, dyslexia, language disabilities, learning disabilities, speech problems, specific academic deficits, and similar conditions that may be the result of mental retardation, deafness, developmental disabilities, autism, cerebral palsy, stroke, disease, head injury, or other neurological impairment. Other instruments for measuring academic ability among this population were also used (e.g., Kaufman Brief Intelligence Test [K-BIT], Wechsler Abbreviated Scale of Intelligence [WASI], Wide Range of Achievement Test [WRAT]).

In addition, the Test of Adult Basic Education (TABE), a nationally normed assessment instrument was used to measure achievement of basic skills commonly found in education curricula (CTB/McGraw-Hill, 2004). The content areas for each female juvenile in this study included the areas of reading and math. The TABE was developed to facilitate testing at each subject's functional level of achievement. The test can measure skills precisely for pre-readers

through high school level and beyond. The aim of functional-level testing is to obtain the most reliable diagnosis of a subject's basic-skill achievement level. The developers of this instrument have assured the validity of this measure through conducting a comprehensive curriculum review and collaborating with educational experts to determine common educational goals in alignment with the knowledge and skills emphasized in current curricula. Evidence for construct validity is comprehensive and integrates evidence from both content and criterion-related validity.

### Data Analysis Procedures

The study was exploratory and descriptive in nature with the primary means of data collection being taken from the juvenile data records. The predominant method of analysis involved descriptive statistics in the form of frequencies, means, and distributions with respect to demographic variables. These would be referred to as attributes since they were variables which could not be manipulated. Recidivism served as the primary variable in this study to allow for possible correlations with the independent variables which were indicative of the academic, behavioral, and emotional characteristics of the study population. Before conducting multivariate analyses, the bivariate associations among academic, behavior, and emotional characteristics were analyzed. Independent sample *t*-tests were conducted for group differences on continuous measures (e.g., IQ, achievement scores, incidents of misbehavior). Pearson's chi-square tests of independence were utilized for group differences on categorical measures (e.g., race/ethnicity, age at first referral, special education disabilities, offender types, *DSM-IV* diagnoses). To determine if there were statistically significant differences between the groups on measures of academic, behavioral, and emotional functioning, the researcher conducted one-way analysis of variance (ANOVA) and *t*-tests. Specific analyses processes will be detailed in Chapter 4. The

focus of this study was to examine the effects of academic, behavioral, and emotional characteristics of female juveniles as a means for determining their relative impact on resocialization and recidivism. The latest version of SPSS 15.0 software (SPSS Inc., 2007), which is a comprehensive system for analyzing data, was utilized by this researcher for this study.

## CHAPTER 4

### ANALYSIS AND DISCUSSION

The research method used for this study was exploratory and descriptive in nature. Since the review of literature revealed a paucity of research on the needs of female offenders involved with the juvenile justice system, this study has been an attempt to expand the research base by classifying and comparing specific attributes of this population. In particular, it examined their demographics and disability prevalence rates, along with certain academic, behavioral, and emotional functioning characteristics in order to further understand their relationship to the resocialization or recidivism of these different groups of female juveniles incarcerated in the state of Texas. The findings from this study may encourage school and delinquency systems personnel to develop successful prevention and intervention programs by recognizing and responding more appropriately to their special needs. With these factors in mind, relevant findings from the review of literature have been compared with conclusions from the data analyses in answering the outlined questions of inquiry.

#### Research Question 1

What are the demographics of the population of female offenders incarcerated in the juvenile justice system in the state of Texas? The present research revealed that out of the 893 female juvenile cases included for study, 822 were current commitments, while the others were 15 reclassifications, 9 recommitments, and 47 parole revocations. Due to incomplete records for two cases, the study consisted of 820 female juveniles incarcerated by the TYC in the state of Texas. Table 1 provides a basic description of the demographics of the study population.

Table 1

*Offender Types for TYC Female Juveniles*

	<i>n</i>	%	Cumulative %
Admission Type ( <i>n</i> = 893)			
Commitment	822	92	92
Reclassification	15	1.7	93.7
Recommitment	9	1	94.7
Parole Revocation	47	5.3	100
Prior Placement Score ( <i>n</i> = 820, 73 missing due to being part of recidivism data)			
0 Prior Placements	316	35.4	38.5
1 Prior Placement	289	32.4	73.8
2 or more Prior Placements	215	24.1	100

For the purposes of this study, 316 female juveniles were considered first-time offenders since they had no prior placements. Of the remaining study participants, 289 had at least one prior placement and 215 had two or more prior placements, qualifying them as recidivists.

Table 2 shows the counties of commitment for TYC female juvenile first-time offenders and recidivists, and represents the areas in Texas from which the largest percentage of participants in this study originated. The ten most populous counties are listed in order with the remaining counties listed last as one consolidated group.



Table 2

*Counties of Commitment for TYC Female Juvenile Offenders*

County	First-time Offenders ( <i>n</i> = 316)		Recidivists ( <i>n</i> = 504)		Total ( <i>n</i> = 820)		<i>df</i> & Asymp. Sig.	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	$\chi^2$	
Harris	65	20.6	92	18.3	157	19.1		
Dallas	27	8.5	60	11.9	87	10.6		
Bexar	22	7.0	48	9.5	70	8.5		
Tarrant		24	7.6	35	6.9	59	7.2	
Travis	13	4.1	25	5.0	38	4.6		
Smith	18	5.7	7	1.4	25	3.0		
Lubbock	5	1.6	13	2.6	18	2.2		
McLennan	8	2.5	9	1.8	17	2.1		
Jefferson	8	2.5	9	1.8	17	2.1		
Nacogdoches	7	2.2	9	1.8	16	2.0		
Total	197	62.3	307	61.0	504	61.4		
All 98 others	119	37.7	197	39.0	316	39.6		
							121.13	107 .09

The  $\chi^2$  goodness of fit was conducted for counties of commitment and recidivism.

Asymptotic significance used in the table calculates and conveys the significance level of a test

via likelihood ratio methods. The closer the asymptotic significance is to zero, the lower the probability of incorrectly assuming a difference when there is none. Essentially, the asymptotic significance is treated as  $p$ . Actual cell frequencies for some counties of less than 5 reduced the precision of the  $\chi^2$  calculations. Hence, a significant deviation from the assumed values was not found ( $\chi^2 (107) = 121.13, p = .09$ ). However, the inclusion of counties as a demographic variable is relevant to examining recidivism in Texas, because its large urban centers are geographically distant from bordering states, thereby, making it unlikely that non-recidivists re-offended outside the borders of Texas.

Studies show that most adolescent females have become involved with the juvenile justice system between the ages of 14 and 16 and have emerged from an impoverished, high crime neighborhood (OJJDP, 1998b). Table 3 reveals the statistics for the age first referred for the female juvenile participants in the present research study.

Table 3

*Age at First Referral for TYC Female Juveniles*

	First-time Offenders		Recidivists		Total				
	(n = 316)		(n = 504)		(n = 820)		df &		
Age at 1 <sup>st</sup> Referral	n	%	n	%	n	%	$\chi^2$		Asymp. Sig.
12 or less	33	10.4	12	2.4	45	5.5			
13 - 15	199	63.0	314	62.3	513	62.6			
16	84	26.6	178	35.3	262	32.0	27.66	2	.00

The  $\chi^2$  goodness of fit was conducted for age at first referral and recidivism. It was assumed that each value would occur an equal number of times. A significant deviation from the assumed values was found ( $\chi^2 (2) = 27.66, p < .01$ ). This indicated that the differences between the expected and obtained frequencies could not be due to sampling fluctuation.

For 2005, TYC reported a median age at commitment of 16 for both male and female juvenile offenders (TYC, 2006b). This study found the mean age for the females ( $n = 820$ ) was 15.97 years with a standard deviation of 1.10 years. Minimum age was 11.58 years and the maximum age found in this sample was 18.50 years. The mean age for first-time offenders ( $n = 316$ ) was 15.97 with a standard deviation of 1.20, and the mean for recidivists ( $n = 504$ ) was 15.97 with a standard deviation of 1.03 years. An independent samples  $t$ -test was conducted and there were no significant  $t$  scores for either equal variances assumed ( $t(818) = -.09, p = .93$ ) or equal variances not assumed ( $t(591) = -.09, p = .93$ ).

One significant commonality among female juvenile offenders has been that of belonging to an ethnic minority. While African American adolescent females accounted for only 12% of the general population, they made up 50% of the female juveniles involved in the juvenile justice system (OJJDP, 1998b). Bloom and Covington (2001) found that 65% of the at-risk population was composed of Caucasian girls, but only 34% of the total number of girls in the juvenile justice system were Caucasian. Additionally, custody rates appeared to vary significantly by race. In the United States, 234 African American females out of 100,000 adolescent girls are taken into custody for juvenile offenses as opposed to only 75 Caucasian girls per 100,000 total females. In addition, the custody rate for Native American/Alaska Native and Hispanic adolescent girls is disproportionately high as well (224 and 100 respectively out of 100,000

adolescent girls) (Girls Incorporated, 2002). Table 4 presents the findings from this study for the rates of race/ethnicity.

Table 4

*Race/Ethnicity of TYC Female Juveniles*

	First-time Offenders ( <i>n</i> = 316)		Recidivists ( <i>n</i> = 504)		Total ( <i>n</i> = 820)		<i>df</i> & $\chi^2$ Asymp. Sig.		
Race/Ethnicity	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%			
African American	98	31	162	32.2	260	31.7			
Caucasian	107	33.9	146	29	253	30.1			
Hispanic	108	34.2	189	37.6	297	36.3			
Other	3	.9	6	1.2	9	1.1	2.28	3	.52

The literature stated that custody rates appeared to vary significantly by race; however, when the  $\chi^2$  goodness of fit was conducted for race/ethnicity and recidivism, a significant deviation from the assumed values was not found ( $\chi^2 (3) = 2.28, p = .52$ ). This indicated that the differences between the expected and obtained frequencies could be due to sampling fluctuation. Due to assuming that all categories of race/ethnicity would be equal, weakened the results to some degree. The actual cell frequencies for some cells of less than 5 reduced the precision of the  $\chi^2$  calculations (only three first-time offenders and six recidivists made up the other race/ethnicity study participants).

This study showed that the total percentage of African American female juveniles

incarcerated by TYC in the state of Texas was 31.7%. This number was much lower than the 50% average reported in the literature (OJJDP, 1998b) and somewhat lower than the 33% reported by TYC for both African American male and female juveniles offenders during fiscal year 2005 (TYC, 2006b). Among the 30.1% Caucasian female juveniles reported in this study, this average was comparatively lower than the 34% average reported in the literature (Bloom & Covington, 2001), but much higher than the 23% reported for both Caucasian male and female juvenile offenders during fiscal year 2005 (TYC, 2006b). Hispanic female juveniles represented 36.3% of the TYC population in this study which appeared disproportionately high but was in concurrence with what has been stated in the literature for this race/ethnicity group (Girls Incorporated, 2002); however, it was still lower than the combined total of Hispanic juveniles, both male and female, reported by TYC for fiscal year 2005 (TYC, 2006b).

Table 5 presents the English proficiency of female juveniles in this present study.

Table 5

*Limited English Proficiency (LEP) of TYC Female Juveniles*

	First-time Offenders		Recidivists		Total				
	(n = 316)		(n = 504)		(n = 820)		df &		
LEP	n	%	n	%	n	%	$\chi^2$	Asymp. Sig.	
<hr/>									
Missing	7	2.2	8	1.6	15	1.8			
No	290	91.8	481	95.4	771	94.0			
Yes	19	6.0	15	3.0	34	4.1	5.02	2	.08

Even though TYC had reported that 10% of both male and female juveniles combined were LEP (TYC, 2006b), this study showed that only 4.1 percent of the female juveniles were LEP. The  $\chi^2$  goodness of fit was conducted for LEP and recidivism, and a significant deviation from the assumed values was found ( $\chi^2 (2) = 5.02, p = .08$ ). This indicated that the differences between the expected and obtained frequencies could not be due to sampling fluctuation.

Other demographic variables were of interest to this researcher, but the nature of such data could not be collected at this time; however, additional demographic information pertinent to this type of exploratory research was identified in the literature. One such variable dealt with family structure, which seemed to be another similarity among female delinquents. In 1997, more than 50% of all African American children were living with only one parent in comparison to approximately 30% of Hispanic children and 20% of Caucasian children in similar situations. It has been found that about 55% of African American incarcerated youth and nearly 50% of Caucasian incarcerated youth came from mother-headed households (Porter, 2003).

Another valuable piece came from the fact that the type of family from which female delinquents develop has usually been fragmented. Many of the female juveniles have a history of being placed in multiple foster homes and often come into the system from a more fragmented family than do adolescent males (Ambrose & Simpkins; Beyer, 2001). One study found over 95% of female juveniles to be from unstable home environments (Acoca, 1999).

Additionally, adolescent female delinquents who become involved with the juvenile justice system typically come from a family of lower socioeconomic status. One report showed that 75% of the girls participating in the PACE Center for Girls lived in low or very low-income areas (PACE Center for Girls Inc., 2003). Porter (2003) stated when race and income are examined together, African American adolescent females, who come from a low-income

household, are the group most likely to be arrested. This is evidenced in their perspective that life is difficult; as a result, they have few expectations for their future (OJJDP, 1998b).

## Research Question 2

What are the prevalence rates of special education disabilities, as well as co-occurring disabilities, among female offenders incarcerated in the juvenile justice system in the state of Texas? Heretofore, a serious gap has existed between the number of youth with disabilities in the general population and those who are incarcerated. The Office of Special Education Programs (OSEP), a division of the U. S. Department of Education, reported in 2001 that the prevalence of disabilities among school-age children in the United States as 9%, while a conservative estimate of 32% was reported for the school-age population incarcerated within the juvenile justice system (Quinn, Rutherford, & Leone, 2001). The actual extent of over-representation and the mechanisms associated with it have not been definitively ascertained. Estimated prevalence of disabilities among incarcerated youth has typically ranged from 30% to 70% (Casey & Keilitz, 1990; Murphy, 1986; Rutherford, Nelson, & Wolford, 1985).

A study conducted recently from the mandatory annual census report to the Office of Special Education Programs at the U. S. Department of Education revealed the following as of December 1, 2000: (a) of the total 33,831 juveniles incarcerated, 81% were enrolled in an education program; (b) the number of incarcerated youth by state ranged from 30 to 7,827, with a median of 509, of which 11.2 % were female and 88.8% were male; (c) the total number of incarcerated youth with disabilities receiving special education services was 8,613, with ranges of 23 to 1,605 eligible by state and the median being 160; and (d) the average prevalence rate of youth with disabilities in these state juvenile correctional systems was 33.4%, with state ranges

from 9.1% to 77.5% and a median of 33% (Quinn, Rutherford, Leone, Osher, & Poirier, 2005).

The present research reveals in Table 6 the following prevalence of primary disability rates among female juveniles incarcerated in the state of Texas.

Table 6

*Female Juveniles in TYC Served Under IDEA by Primary Disability Type*

	First-time Offenders		Recidivists		Total				
	(n = 316)		(n = 504)		(n = 820)		df &		
Primary Disability	n	%	n	%	n	%	$\chi^2$	Asymp. Sig.	
<hr/>									
Other Health Impaired									
(OHI)	7	2.2	24	4.8	31	3.8			
Mental Retardation	4	1.3	1	0.2	5	0.6			
Learning Disabled	37	11.7	104	20.6	141	17.2			
Emotionally									
Disturbed (ED)	25	7.9	61	12.1	86	10.5			
No Disability	243	76.9	314	62.3	557	67.9	25.31	4	.00
<hr/>									

The  $\chi^2$  goodness of fit was conducted for primary disability groups and recidivism. It was assumed that each value would occur an equal number of times. A significant deviation from the assumed values was not found ( $\chi^2 (4) = 25.31, p < .01$ ). This indicated that the differences between the expected and obtained frequencies could be due to sampling fluctuation.

One recent study of prevalence in the literature found 33.4% of incarcerated youth with



disabilities (including both males and females), with the two largest categories of primary disabilities being "Emotional Disturbance" (47.7%) and "Specific Learning Disability" (38.6%), followed by (a) "Mental Retardation" (9.7%); (b) "Other Health Impairments" (2.9%); and "Multiple Disabilities" (0.8%; Quinn et al., 2005). In comparison, the present study found a comparative overall prevalence rate of 32.1% for incarcerated female youth with disabilities. This was only 1.3% below the percentage of 33.4% for males and females combined in the study by Quinn et al. (2005) and 7.9% below the TYC report of the combined population identified as eligible for special education services in 2005 being 40% (TYC, 2006b).

In comparing findings for findings of prevalence for primary disabilities, the present research reported an extremely low percentage of ED (10.5%) next to the Quinn et al. study (2005) of 47.7% ED (a difference of 37.2%). The present research reported 17.2% LD, which was 11.4% below the Quinn et al. (2005) study's finding of 38.6% LD. For MR, Quinn et al. (2005) reported 9.7%, but this study found only 0.6% MR. Finally, for the category of OHI, the present finding of 3.8% was much higher than what was reported by Quinn et al. (2005) at being 2.9% (a 1.1% higher percentage for female juveniles over both males and females).

Several explanations for the varying ranges of prevalence rates in past research studies among incarcerated youth were outlined in the literature. One explanation has been school failure, susceptibility, differential treatment, and metacognitive deficits (Quinn et al., 2005). Nevertheless, the population of female juveniles with cognitive and other disabilities has been found to be over-represented in the juvenile justice system.

Tables 7 and 8 respectively outline the findings of the present research for prevalence of secondary disabilities and co-occurring disabilities among the study participants.

Table 7

*Female Juveniles in TYC Served Under IDEA by Secondary Disability Type*

Secondary Disability	First-time Offenders ( <i>n</i> = 308)		Recidivists ( <i>n</i> = 496)		Total ( <i>n</i> = 804)		<i>df</i> & $\chi^2$ Asymp. Sig.	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
OHI	4	1.3	10	2	14	1.7		
Mental Retardation	1	0.3	0	0	1	0.1		
Learning Disabled	1	0.3	4	0.8	5	0.6		
Emotionally Dis.	4	1.3	17	3.4	21	2.6		
No Disability	295	95.8	462	93.1	757	94.2	6.67	5 .25

Table 7 contains the frequency counts for both female juvenile first-time offenders and recidivists who are being served under IDEA according to their secondary disability type. The  $\chi^2$  goodness of fit was conducted for secondary disability and recidivism. It was assumed that each value would occur an equal number of times. A significant deviation from the assumed values was not found ( $\chi^2 (5) = 6.67, p = .25$ ). This indicated that the differences between the expected and obtained frequencies could be due to sampling fluctuation.

Table 8 illustrates the female juveniles who present with both primary and secondary disabilities in the study sample. Even though other health impaired (OHI) is often used with students who exhibit attention deficit hyperactivity disorder (ADHD), it contains other

conditions as well. Consequently, OHI can be a primary disability with a co-occurring secondary disability of OHI.

Table 8

*Female Juveniles in TYC Served Under IDEA for Co-occurring Disabilities*

	First-time Offenders		Recidivists		Total			
	(n = 308)		(n = 496)		(n = 804)		df &	
Primary/Secondary	n	%	n	%	n	%	$\chi^2$	Asymp. Sig.
OHI/OHI	0	0	1	0.2	1	0.2		
OHI/LD	1	0.3	3	0.6	4	0.9		
OHI/ED	0	0	1	0.2	1	0.2		
LD/OHI	3	0.3	5	0.1	6	0.4		
LD/MR	1	0.3	0	0	1	0.3		
LD/ED		4	1.3	0	0	4	1.3	
ED/OHI	1	0.3	3	0.6	4	0.9		
ED/LD		0	0	1	0.2	1	0.2	
ED/ED		0	0	1	0.2	1	0.2	
First-time Offenders							115.87	20 .00
Recidivists							118.43	16 .00

The  $\chi^2$  goodness of fit was conducted for co-occurring disabilities among first-time female juvenile offenders and their recidivist counterparts. A significant deviation from the

assumed values was found for both groups: first-time offenders ( $\chi^2 (20) = 115.87, p < .01$ ) and recidivists ( $\chi^2 (16) = 118.43, p < .01$ ). These data indicate that the differences between the expected and obtained frequencies could not be due to sampling fluctuation.

Quinn et al. (2005, p. 342) pointed out that "in all likelihood the number of students with disabilities in juvenile corrections compared to the number of youth incarcerated in juvenile corrections who are actually eligible for special education services is underestimated." They pointed out that the variability in rates of identification and service delivery for this population may also be due to the fact that many youth with psychiatric needs have not been identified as being eligible for special education services. Studies revealed that this under-identification may have been indicative of differences between mental health and special education criteria (US Dept. of Education, 1998; Kendziora & Osher, 2004).

Recently, efforts have been made through legislation to ensure that juvenile correctional institutions provide a high-quality education to students with and without disabilities assigned to their facilities (Gagnon & Mayer, 2004). The No Child Left Behind Act (NCLB; 2001) and the Individuals with Disabilities Education Act (IDEA; 2004) are examples. The NCLB (2001) placed increased emphasis on monitoring student academic progress through assessment of academic outcomes. With the recent re-authorization of IDEA in 2004, schools "shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning" (Section 1414b). This revision should serve to alleviate the problems which have been come about due to delaying intervention until the student's achievement is sufficiently low enough for the discrepancy measure to be met and due to identifying students at

a later age when the academic problems are difficult to re-mediate even with the most intense remediation efforts (Torgesen, 2001).

From this point on in the analyses of the data, all female juveniles with no designated disabilities were evaluated as being one group. Female juveniles identified as having ED only have been assigned to the second group. All other female juveniles identified as having LD, OHI, or any other disabilities were assigned to the third group. OHI would have served as its own group, but the numbers were not large enough to reveal valid statistical results when comparing groups. Those youth with co-occurring disabilities were placed according to their primary disability category. The combined sample of female juveniles ( $n = 822$ ) were partitioned into these groups: (a) No Disability ( $n = 559$ ); (b) ED ( $n = 141$ ); and Other ( $n = 122$ ).

### Research Question 3

What are the academic functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas? A common characteristic of female juveniles has been a history of academic failure due to their poor school performance and propensity for dropping out of school altogether (Acoca, 1999; American Bar Association and the National Bar Association, 2001, OJJDP, 1998b). Veysey (2002) identified poor academic achievement as the most immediate factor associated with criminal conduct in girls. Juvenile justice-involved females have been shown to be delayed in their academic development when compared with their peers, and as a result, end up falling through the cracks of the educational system.

In the area of academic functioning, studies have consistently shown incarcerated youth to be one year to several years below expected grade levels (Beebe & Mueller, 1993; Fejes-

Mendoza, Miller, & Eppler, 1995; Fejes-Mendoza & Rutherford, 1987; Rincker, Reilly, & Braaten, 1990). TYC reported all male and female in 2005 had a median reading and math achievement level at 5<sup>th</sup> grade (five years behind their peers; TYC, 2006b). For women, studies showed their academic functioning levels to range between fifth- and ninth-grade levels (Fejes-Mendoza & Rutherford, 1987; Rincker et al., 1990). It appeared that incarcerated juveniles classified as non-recidivists functioned at an academically higher level than recidivists. Further, studies regarding the intelligence of incarcerated youth showed that juvenile delinquents appeared to function within below-average to average levels of intelligence with documented mean Full Scale IQ scores of 80 to 100 (Archwamety & Katsiyannis, 1998; Beebe & Mueller, 1993; Katsiyannis & Archwamety, 1999; Mesinger, 1976). TYC reported that for all male and female juvenile offenders in 2005, 81% had IQs below the mean score of 100 (TYC, 2006b).

For this study, descriptive statistics were used to gain a better understanding of the overall group dynamics for female juvenile offenders on academic measures. Before beginning analysis, the *TABE* reading and math gain scores had to be computed as a measure of individual academic growth in reading and math by subtracting pre-test scores from post-test scores and then multiplying by amount of time derived from difference between testing dates. The difference was then divided by 12 to convert the score into a yearly rate of growth based upon a twelve month school year since the female juveniles in this study attend school year round. Table 9 presents the academic functioning characteristics of the female juveniles in the three disability groups.

Table 9

*Academic Functioning Characteristics of Female Juvenile Offenders*

No Disability			ED			Other			Total		
<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
IQ											
554	91.37	11.55	140	87.99	12.85	122	84.45	10.72	816	89.76	11.93
Last School Grade Completed Prior to Incarceration											
555	8.33	1.03	141	8.49	1.09	817	8.32	1.12	817	8.36	1.05
Reading Gain Score between Pre-test and Post-test Evaluations											
297	2.77	2.67	71	2.75	2.82	76	2.37	2.25	444	2.27	2.62
Math Gain Score between Pre-test and Post-test Evaluations											
285	2.03	2.29	74	1.83	1.79	72	1.87	2.37	431	1.97	2.23

The Levene Statistic (2.878) for the Test of Homogeneity of Variance indicated that the Reading Gain score was the only score that approximated significance at  $p = .06$ . To investigate differences among the three groups, separate one-way ANOVA were conducted. Table 10 represents the findings when comparing academic measures for each disability group. A post hoc test, Tukey Honestly Significant Difference (HSD), was used to better understand why each ANOVA yielded specific results.

Table 10

*ANOVA for Academic Functioning Characteristics by Disability Group*

Source	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>
IQ at Commitment				
Between	5,318.9	2	19.55	.00
Within	110,613.6	813		
Total	115,932.5	815		
School Grade Completed Prior to Incarceration				
Between	2.9	2	1.31	.27
Within	906.9	814		
Total	909.9	816		
Reading Gain Score between Pre-test and Post-test Evaluations				
Between	9.7	2	0.7	0.5
Within	3,045.6	441		
Total	3,055.2	443		
Math Gain Score between Pre-test and Post-test Evaluations				
Between	3.2	2	0.32	0.72
Within	2,125.6	428		
Total	2,128.8	430		

Results showed that the three groups differed significantly on the academic measure of IQ  $F = (2; 115,932.47) 19.55, p < .01$ . This finding indicates different academic functioning



capacities among the groups of female juveniles, with and without disabilities, due to the effects of varying levels of IQ among them. The Tukey HSD also showed that the mean difference for these disability groups was significant at the .05 level: (a) No Disability & ED ( $p < .01$ ); (b) No Disability & Other Disabilities, excluding ED ( $p < .01$ ); and (c) ED & Other Disabilities, excluding ED ( $p < .04$ ). Table 11 reveals the associations for different disability groups on measures of academic functioning.

Table 11

*Correlations of Academic Functioning Measures by Disability Group*

	Pearson's $r$	$p$	Sum of Squares	Covariance	$N$
IQ & Last Grade	.06	.07	643.1	.79	811
IQ & Read Gain	.13**	.01	1,676.9	3.82	440
IQ & Math Gain	.17**	0	1,792.4	4.21	427
Last Grade & Read Gain					
	-.07	.13	-84.4	-.19	444
Last Grade & Math Gain					
	-.08	.09	-76.9	-.18	431
Read Gain & Math Gain					
	.49**	.00	1,193.4	2.84	421

*Note.* \*\* Correlation is significant at the .01 level (2-tailed).

Several correlations were found to be significant. In particular, Pearson's  $r$  (correlation is significant at the .01 level for 2-tailed) showed the group differences to be most significant on

measures of IQ and Reading and Math Gain scores, as well as between Reading and Math Gain scores themselves.

#### Research Question 4

What are the behavioral functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas?

A shared descriptor among female juveniles has been arrest for a status offense, which is usually their first contact with the juvenile justice system (Girls Incorporated, 2002). Typical status offenses committed by females involved running away, failure to attend school, violating liquor laws, and curfew violations (Girls Incorporated, 2002; OJJDP, 1998c). The youth sent to TYC are the state's most serious or chronically delinquent offenders. In fiscal year 2005, 33% of all new arrivals, which included both males and females, had committed violent offenses, which was the same percentage as in fiscal year 2004 (TYC, 2006b). The two types of violent offenses are type A violent (e.g., murder, capital murder, sexual assault, aggravated sexual assault) and type B violent (all other violent offenses). In this study, only three female juveniles were considered to be chronic serious offenders (classifying offense is a felony, and youth has been found to have committed at least two separate and distinct prior felonies, all in separate due process hearings), while the majority of 603 female juvenile offenders were non-violent (e.g., nonviolent felonious drug sale, nonviolent firearms violation, general offender) and the remaining 287 were violent offenders (as shown in Table 12).

Table 12

*Offender Classification for Female Juvenile Offenders*

Classification ( <i>n</i> = 893)	<i>n</i>	%	Cumulative %
Chronic Serious Offender	3	0.3	0.3
Non-Violent	603	67.5	67.9
Violent	287	32.1	100

The subclassifications for the present research subjects are outlined in Table 13.

Table 13

*Offender Subclassifications for Female Juvenile Offenders*

Subclassification ( <i>n</i> = 893)	<i>n</i>	%	Cum. %
A – Type A violent (murder, capital murder, sexual assault, aggravated sexual assault)	11	1.2	1.2
B – Type B violent (all other violent offenses)	237	26.5	27.8
CSD - Controlled Substances Dealer	8	0.9	28.7
CSO - Chronic Serious Offender	3	0.3	29
FAO – Used firearm in commission of offense	11	1.2	30.2
GEN – All offenders not included in any other category	584	65.4	95.6
SEN – Youth given determinate sentence (for certain severe offenses; all categories listed above are for youth given indeterminate sentences)	39	4.4	100

The majority of females in the present study (65.4%) were general offenders. However, the number of Type B violent offenders (26.5%) is indicative of the increasing number of serious offenses being committed by this population (see Table 14).

Table 14

*Offense Classifications for Female Juvenile Offenders*

Classification ( <i>n</i> = 822)	<i>n</i>	%	Cumulative %
Capital Murder	3	0.4	0.4
First Degree Felony	53	6.4	6.8
Second Degree Felony	172	20.9	27.7
Third Degree Felony	141	17.2	44.9
Misdemeanor Type A	145	17.6	62.5
Misdemeanor Type B	59	7.2	69.7
State Jail Offense	249	30.3	100

The results in Table 14 show that the majority of female juvenile offenders in the state of Texas have been incarcerated for serious crimes (e.g., felony commitments, Type A misdemeanors). The large percentage of state jail offenses (30.3%) is a major concern. Table 15 reveals the at-risk status of the research subjects.

Table 15

*Risk Level and Recommended Restriction for Female Juvenile Offenders*

Risk Level Score ( <i>n</i> = 893)	<i>n</i>	%	Cumulative %
Low Risk (rating of 3 or less)	78	8.7	8.7
High Risk (rating of 4 or more)	742	83.1	90.5

The percentage of all new arrivals, including both males and females, in fiscal year 2005, categorized as high risk offenders was 38% (TYC, 2006b). In this population, 82.9% were initially assigned to a high-restriction facility. Table 16 illustrates differences between disability groupings on measures of behavioral functioning.

Table 16

*Behavioral Functioning Characteristics by Disability Group*

No Disability			ED			Other			Total		
<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Prior Placements Prior to Current Commitment											
557	.94	1.33	141	1.54	1.8	122	1.24	1.19	820	1.09	1.42
Behavior Incidents during Incarceration											
557	8.28	10.7	141	14.31	13.39	122	14.33	14.7	820	10.22	12.18
Risk Score Assessed at Commitment											
557	5.93	2.52	141	7.55	2.25	122	7.06	2.33	820	6.37	2.53

First, a significant difference exists between non-disabled and the ED group on prior placements ( $p < .01$ ). Significant differences between: (a) Non-disabled and ED on behavior incidents, ( $p < .01$ ); (b) Non-disabled & Other disabilities, excluding ED on behavior incidents, ( $p < .01$ ); (c) Non-disabled and ED on risk scores ( $p < .01$ ); and (d) Non-disabled & Other disabilities, excluding ED on risk scores, ( $p < .01$ ).

In Table 17 the analysis of variance reveals significant differences for the behavioral functioning characteristics based on prior placements before commitment, behavioral incidents while incarcerated, and risk score at commitment.

Table 17

*Behavioral Functioning Characteristics by Disability Group*

Source		Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>
Prior Placements before Current Commitment	Between	42.91	2	10.92	.00
	Within	1,604.42	817		
	Total	1,647.32	819		
Behavior Incidents while Incarcerated	Between	6,515.94	2	23.17	.00
	Within	114,889.42	817		
	Total	121,405.36	819		
Risk Score Assessed at Commitment	Between	364.63	2	30.38	.00
	Within	4,903.43	817		
	Total	5,268.06	819		

All groups were found to be significant at  $p < .01$ . The Levene statistic for the test of homogeneity of variance indicated that (a) Prior Placements score was significant at  $p < .01$ ; (b)

Behavior Incidents score was significant at  $p < .01$ ; and (c) Risk Score was significant at  $p < .03$ .

For differences between disability categories, the Tukey HSD post hoc test for multiple comparisons found significant group differences for the following: (a) Non-Disabled & ED on prior placements ( $p < .01$ ); (b) Non-Disabled & ED on behavior incidents ( $p < .01$ ); (c) Non-disabled & Other disabilities group, excluding ED on behavior incidents ( $p < .01$ ); (d) Non-Disabled & ED on risk score ( $p < .01$ ); and (e) Non-disabled & Other disabilities group, excluding ED on risk score ( $p < .01$ ).

In order to specify which groups had definite differences between them, Table 18 illustrates an analysis of bivariate correlations for prior placements, behavior incidents, and risk score.

Table 18

*Correlations of Behavioral Functioning Characteristics by Disability Group*

	Pearson's $r$	$p$	Sum of Squares	Covariance	$N$
Prior Placements & Behavior Incidents					
	0.1**	.01	1,389.94	1.7	820
Prior Placements & Risk Score					
	.38**	.00	1,117.29	1.36	820
Behavior Incidents & Risk Score					
	.52**	.00	13,183.36	16.1	820

*Note.* \*\* Correlation is significant at the .01 level (2-tailed).

According to the Pearson correlation, the following demonstrated significant differences:

(a) prior placements & behavior incidents ( $p < .01$ ); (b) prior placements & risk score ( $p < .01$ ); and (c) behavior incidents & risk score ( $p < .01$ ). Overall, the study highlights the differences found in the female juvenile offender population between groups of disability categories and groups differing on recidivism measures. These appear to be relevant in terms of behavior incidents and overall risk scores.

#### Research Question 5

What are the emotional functioning characteristics of female offenders, with and without special education disabilities, incarcerated in the juvenile justice system in the state of Texas? In 2001, juvenile justice residential placement facilities held more than 104,000 juvenile offenders (Sickmund, Sladky, & Kang, 2004). Research has well established that the majority of youth involved with the juvenile justice system have mental health disorders (Skowrya & Coccozza, 2006). Understanding, identifying, and responding to the psychiatric disorders of juvenile detainees has been determined to be one of the largest demands put upon the juvenile justice system today. Accordingly, it has been surmised that providing such youth with psychiatric services may be critical to breaking the cycle of recidivism (Teplin et al., 2006). To address the needs of such youth, justice officials need to know the kinds of disorders that are most common and their prevalence among juvenile detainees.

Of both male and female youth sent to TYC in fiscal year 2005, 39% had a high need for drug treatment and 36% had severe mental health problems (TYC, 2006b). Table 19 shows the results of this study for the emotional functioning characteristics based on the Global Assessment of Functioning score (GAF) for the female members of the three different groups of disability categories.



Table 19

*Emotional Functioning Characteristics by Disability Group*

No Disability			ED			Other			Total		
<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
<i>DSM-IV Axis V – Global Assessment of Functioning (GAF Score)</i>											
552	55.74	6.71	141	52.71	6.19	122	53.26	6.78	815	54.84	6.75

The levels of the GAF scores for each disability group of first-time offenders and recidivists are in concurrence with a recent study by Shufelt and Cocozza (2006) that reported approximately 25% of youth experience disorders so severe that their ability to function is significantly impaired. The mean scores for the female juveniles were all in the 51 to 60 range which signifies a functioning level with “moderate symptoms” or “moderate difficulty in social, occupational, or school functioning” (APA, 1994, p. 32). Table 20 shows the analysis of variance between the disability groups based on their GAF scores.

Table 20

*ANOVA of Emotional Functioning Characteristics by Disability Group*

Source	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>
<i>DSM-IV Axis V – Global Assessment of Functioning (GAF Score)</i>				
Between	1,390.09	2	15.79	.00
Within	35,739.12	812		
Total	37,129.21	814		

Results from the ANOVA revealed that the disability groups differed significantly on the emotional functioning measure GAF  $F = (2; 37,129.21) 15.79, p < .01$ . The Tukey HSD revealed significant differences only between the following: (a) Non-Disabled & ED on GAF ( $p < .01$ ) and (b) ED & Other disabilities, excluding ED ( $p < .01$ ). Thus, the female juvenile offenders in this study scored differently on mental health functioning based upon their membership as either non-disabled, ED, or other disabled (excluding ED).

Table 21 gives the results for bivariate associations among the disability groups between the measures of GAF, behavior incidents while incarcerated, and overall risk score for the female juvenile offenders.

Table 21

*Correlations of Emotional Functioning Characteristics by Disability Group*

	Pearson's $r$	$p$	Sum of Squares	Covariance	$N$
Behavior Incidents & GAF Score					
	-.35**	.00	-23,457.37	-28.82	815
Risk Score & GAF Score					
	-.33**	.00	-4,581.23	-5.63	815

According to the results in Table 21, both groups reveal significant differences at  $p < .01$ . The negative sign in front of the correlation coefficient reveals that the relation is an inverse one (i.e., the higher the number for behavior incidents and for risk score, the lower the GAF score). The Center for Mental Health Services (2001) reported that children and adolescents with

mental, emotional, or behavioral health problems stayed in the juvenile justice system 5.7 times longer than other juveniles. Their estimates showed that 25% to 31% of these children had been abused and that 6% to 28% had previously attempted suicide.

The President's *New Freedom Commission Report on Mental Health* (2003) revealed that Americans with mental illness deserve excellent care and emphasized the importance of working across child-serving systems to meet the needs of youth with mental health problems interfacing with the juvenile justice system. This report revealed that 50-75% of youth in juvenile detention and correctional facilities have diagnosable, untreated mental disorders (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). A study by Coccozza and Skowrya (2000) found that at least one out of every five youth in the juvenile justice system has a serious mental health disorder. Studies have demonstrated that anywhere from 65% to 70% of youth in the juvenile justice system meet the criteria for a diagnosable mental health disorder (Shufelt & Coccozza, 2006; Teplin et al., 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002; Wasserman, Ko, & McReynolds, 2004).

The National Center for Mental Health and Juvenile Justice conducted a multi-state mental health prevalence study on youth in three different types of juvenile justice settings. Over 70% of youth were found to meet criteria for at least one mental health disorder. The most common was disruptive disorders, followed by substance use disorders, anxiety disorders and mood disorders. It was shown that the majority of youth had multiple diagnoses with over 90% who were diagnosed with conduct disorder also meeting the criteria for another disorder (Shufelt & Coccozza, 2006).

It has been stated that one of the largest needs in the juvenile justice system today has been determined to be that of understanding, identifying, and responding to the psychiatric

disorders of juvenile detainees. It has been surmised that providing such youth with psychiatric services may be critical to breaking the cycle of recidivism (Teplin et al., 2006). Table 22 illustrates the findings of this research utilized the *DSM-IV* diagnoses from Axis I to report the types of mental health problems found among the population of female juveniles, with and without disabilities, incarcerated in the state of Texas segregated as to whether they are first-time offenders or recidivists.

These data validate the findings from studies in the literature in that they demonstrated high rates of co-morbidity of substance abuse/dependence with a co-morbid psychiatric diagnosis. In this research, the most frequently occurring disorders were among the recidivists, with substance use disorders being the highest. In fact, substance use disorder among female juvenile recidivists with ED was almost as high as that for the non-disabled group of recidivists. The second most frequently occurring disorder was conduct disorder which had higher rates among the recidivists from all disability groups as well. The third most frequently occurring disorder was neglect/physical/sexual abuse of child (victim), followed by depressive disorder and mood disorder. There were only 72 diagnoses of ADHD among the 504 subjects with *DSM-IV* Axis I diagnoses, and in this study it was not possible to tell if they correlated with the reports of OHI in the special education population. This low number of diagnoses for ADHD was not in concurrence with the finding that it is the condition most often co-occurring with delinquency (other than Conduct Disorder, which has significant overlap with delinquency; Osher et al., 2002).

Table 22

*Most Frequently Occurring DSM-IV Diagnoses for Female Juveniles*

	No Disability (n = 314)		ED (n = 104)		Other Disabilities (n = 86)		Total (n = 504)	
	FTO*	R**	FTO*	R**	FTO*	R**	FTO*	R**
Adjustment Disorder	10	16	1	9	3	6	14	31
Anxiety Disorder	4	3	0	3	0	4	4	10
Attention-Deficit/Hyperactivity Disorder	16	14	2	14	5	13	23	41
Bipolar Disorder	7	27	6	17	5	10	18	54
Conduct Disorder	87	234	22	80	23	61	132	375
Depressive Disorder	53	91	12	37	2	39	67	167
Disruptive Behavior Disorder	42	47	3	11	4	6	49	64
Dysthymic Disorder	16	20	2	5	4	7	22	32
Intermittent Explosive Disorder	2	2	2	5	1	4	5	11
Mild/Moderate Mental Retardation	5	8	3	6	4	12	12	26
Mood Disorder	26	50	10	30	6	21	42	101
Neglect/Physical/Sexual Abuse of Child (Victim)	83	165	11	62	15	40	109	267
Oppositional Defiant Disorder	1	5	2	2	2	2	5	9
Parent-Child Relational Problem	30	57	4	16	3	8	37	81
Personality Disorder	10	45	3	23	3	19	16	87
Posttraumatic Stress Disorder	19	22	4	12	4	6	27	40
Substance Use Disorders	303	512	45	465	38	85	386	1,062
Totals	715	1,090	133	789	122	346	971	2,225

Note. \* Denotes first-time offender. \*\* Denotes recidivist.

Randall, Henggler, Pickrel, and Brondino (1999) conducted a study of co-morbidity of substance abuse/dependence with a second psychiatric diagnosis and found that virtually all females (99%) met criteria for co-morbidity compared to only 69% of their male counterparts. Similarly, Kataoka (2001) found that 80% of incarcerated female juveniles exhibited symptoms of a mental or substance use disorder with 79% having a co-occurring substance abuse problem in addition to clinically significant depressive or anxiety symptoms. The present research also was in concurrence with other studies that revealed that this population tended to have high rates of major depression; anxiety disorders, including post-traumatic stress disorder (PTSD); somatization disorders; and borderline personality disorders (Dembo et al., 1993; Richards, 1996; Rohde, Mace, & Seeley, 1997; Timmons-Mitchell et al., 1997; Ulzen et al., 1998). Furthermore, in the annual report of the Coalition for Juvenile Justice (2000), titled *Handle With Care: Serving the Mental Health Needs of Young Offenders*, it was revealed that 73% percent of youth in juvenile facilities reported mental health problems during screening; 57% had previously received treatment; 55% had symptoms associated with clinical depression; 50% had conduct disorders; up to 45% had attention-deficit hyperactivity disorders (ADHD); and many had multiple diagnoses. More than half of these youth with psychological disorders were also experiencing a substance abuse disorder. Similarly, this study found high rates of these disorders existed among the female juvenile offenders in the state of Texas.

The U. S. Department of Health and Human Services stated in the *Report of the Surgeon General's Conference on Children's Mental Health* (2000) that the juvenile justice system has become the *default* mental health system, particularly for minority and economically disadvantaged youth. Since the de-institutionalization of the mental health system, the reliance on justice systems for care of the mentally ill has steadily increased (Teplin et al., 2002). Grisso

and Barnum (2000) reported rates of mental illness to be substantially higher in the juvenile justice system than those detected in the general population. Also, rates of psychiatric disorder for youth in juvenile justice settings have been higher than that of youth in community samples and comparable to youth in clinical settings (National Mental Health Association [NMHA], 1999; Otto, Greenstein, Johnson, Friedman, & Coccozza, 1992). Murphy (2003) stated that every year, 110,000 children and youth are held in juvenile detention and correctional facilities all over the United States. Between 55, 000 and 82,500 of those have diagnosable mental health illnesses that interfere with their daily functioning. Boesky (2002) reported that a large number of juvenile offenders are “sick kids in need of treatment.”

The results of treatment needs for the female juvenile offenders in this study have been outlined in the following tables, listed by offender type for each disability group. The lower the priority listed, such as one, the higher the need for treatment.

Table 23

*Medical Treatment Needs of Female Juvenile Offenders*

Medical Treatment Needs	No Disability		ED		Other Disabilities		Total	
	FTO*	R**	FTO*	R**	FTO*	R**	FTO*	R**
Priority Two <sup>†</sup>	18	16	1	3	2	3	21	22
Priority Three	177	224	29	83	23	3	229	374
Priority Four	46	71	7	18	11	16	64	105

*Note.* \* Denotes first-time offender. \*\* Denotes recidivist. <sup>†</sup>High need.

The results in Table 23 indicate that only 21 first-time offenders and 22 recidivists in the present study are rated as having medical treatment on the priority two level (high need) that requires frequent access to off-site medical or dental care. The majority of female offenders required minor medical treatment or none at all.

Table 24

*Mental Health Treatment Needs of Female Juvenile Offenders*

Mental Health Treatment Needs	No Disability		ED		Other Disabilities		Total	
	FTO*	R**	FTO*	R**	FTO*	R**	FTO*	R**
Priority One <sup>‡</sup>	2	2	0	1	0	1	2	4
Priority Two	22	31	8	23	5	16	35	70
Priority Three	79	117	18	50	12	40	109	207
Priority Four	138	161	11	30	19	29	168	220

Note. \* Denotes first-time offender. \*\* Denotes recidivist. <sup>‡</sup>Highest need.

The results in Table 24 appear to contradict statements from the literature for high needs of mental health treatment among this population. The priority levels for the female juveniles in this research study appear to have an inverse relationship, in that the largest numbers of first-time offenders and recidivists have the lowest need. Only six first-time offenders and recidivists were on priority level one requiring CSU or psychiatric hospital care. Next, 105 first-time offenders and recidivists were on priority level two which required placement in a specialized mental health treatment program. The next to largest group of first-time offenders and recidivists were assigned to priority level three indicating they may require a combination of medication and/or program adaptations in a general program. Last, the largest group of first-time offenders and recidivists combined ( $n = 388$ ) were assigned to level four for minimal or no need for mental health treatment or adaptation upon incarceration.



Table 25

*Chemical Dependency Treatment Needs of Female Juvenile Offenders*

Chem. Dep. Treatment Needs	No Disability		ED		Other Disabilities		Total	
	FTO*	R**	FTO*	R**	FTO*	R**	FTO*	R**
Priority One <sup>‡</sup>	47	80	10	37	7	27	64	144
Priority Two	107	135	15	34	17	37	139	206
None	87	96	12	33	12	22	111	151

Note. \* Denotes first-time offender. \*\* Denotes recidivist. <sup>‡</sup>Highest need.

Table 25 shows that the chemical dependency treatment needs of female juveniles in this study are not the highest need, which is contradictory to reports in the literature. There were 208 first-time offenders and recidivists on priority one level (highest need) for which they required specialized chemical dependency treatment. There were 345 first-time offenders and recidivists on priority two level they required adaptations to resocialization treatment in a general program. The remaining 262 first-time offenders and recidivists had no need for chemical dependency treatment or adaptation.

Table 26

*Sexual Behavior Treatment Needs of Female Juvenile Offenders*

Sex. Bhvr. Treatment Needs	No Disability		ED		Other Disabilities		Total	
	FTO*	R**	FTO*	R**	FTO*	R**	FTO*	R**
Priority One <sup>‡</sup>	0	1	0	0	0	0	0	1
Priority Two	5	4	1	2	2	2	8	8
Priority Four	236	306	36	102	34	84	314	492

Note. \* Denotes first-time offender. \*\* Denotes recidivist. <sup>‡</sup>Highest need.

The low needs for sexual behavior treatment are due to this being a problem primarily for the male population. Only one female recidivist required specialized sexual behavior treatment.

Sixteen first-time offenders and recidivists were on priority level two which required adaptations to resocialization treatment. The remainder of the first-time offenders and recidivists ( $n = 806$ ) had no treatment needs in this area.

Table 27

*Capital and Serious Violent Offender Treatment Needs of Female Juveniles*

CSVO Treatment Needs	No Disability		ED		Other Disabilities		Total	
	FTO*	R**	FTO*	R**	FTO*	R**	FTO*	R**
Priority One <sup>‡</sup>	9	2	1	0	5	2	15	4
Priority Two	18	15	1	2	3	0	22	17
None	214	294	35	102	28	84	277	480

Note. \* Denotes first-time offender. \*\* Denotes recidivist. <sup>‡</sup>Highest need.

The percentage for capital and violent serious offending needs was small. Only 19 first-time offenders and recidivists were assigned as priority one (highest need) which required specialized Capital and Serious Violent Offender treatment. For priority level two, there were 39 first-time offenders and recidivists who required adaptations to resocialization treatment. The remaining 757 first-time offenders and recidivists were in no need of Capital and Serious Violent Offender treatment or adaptation.

Table 28

*Mental Retardation Treatment Needs of Female Juvenile Offenders*

Mental Retardation Treatment Needs	No Disability		ED		Other Disabilities		Total	
	FTO*	R**	FTO*	R**	FTO*	R**	FTO*	R**
Priority One <sup>‡</sup>	0	0	0	0	1	1	1	1
Priority Two	2	2	1	0	2	1	5	3
None	239	309	36	104	33	84	306	497

Note. \* Denotes first-time offender. \*\* Denotes recidivist. <sup>‡</sup>Highest need.

Table 28 reflected the small population who were in need of treatment for mental retardation. There were only two female first-time offenders and recidivists on priority level one requiring specialized mental retardation services. Eight were on priority level two requiring adaptations to resocialization treatment, and the remaining 803 female juveniles had no need for mental retardation interventions or adaptation.

Overall, a substantial number of incarcerated female juvenile offenders were shown to have multiple treatment needs. It has been stated that a major concern for youths in the juvenile justice system has been the level of untreated mental health problems. A study by Kataoka et al., (2001) stated that between 1981 and 2001, there was a 103% increase (four times more than for males) in the arrest rate of female juveniles. They pointed out that without mental health treatment these adolescent females often demonstrated considerable neuropsychological and social impairments into adulthood. In addition, the level of internalized disorders related to depression and anxiety were clinically more common among this population. Even though their study sample only involved 54 incarcerated females ages 14-to-18-years-old, they found that 80% warranted an evaluation for an emotional or substance abuse disorder.

In order make a final analysis of the academic, behavioral, and emotional functioning characteristics descriptive of the female juveniles in this study, comparisons were made between the disability groups of female juvenile offenders on variables of interest shown to be significant with regard to resocialization or recidivism. Table 29 shows the results for (a) last school grade completed, (b) IQ, (c) reading gain score, (d) math gain score, (e) behavior incidents, (f) GAF score, and (g) prior placements.

Table 29

*Comparisons of Variables of Interest for Female Juveniles*

Variable	Mean	Standard Deviation	<i>n</i>
Last School Grade Completed	8.36	1.06	817
IQ	89.76	11.93	816
Reading Gain Score	2.69	2.63	444
Math Gain Score	1.97	2.23	431
Behavior Incidents	10.22	12.18	820
GAF Score	54.84	6.75	815
Prior Placements	1.09	1.42	820

Table 29 reveals the academic, behavioral, and emotional functioning characteristics of female juvenile first-time offenders and recidivists, with and without disabilities, which are very similar to attributes outlined in the literature as being indicative of risk for delinquency and recidivism. They typically reached an education level of 8<sup>th</sup> grade or less before becoming incarcerated. Their IQ is usually in the range of 80 to 90 points, with their reading and math achievement levels lagging about five years behind those of their age group. Their gains in reading and math are usually two to three levels per year. The female juveniles averaged 10 documented behavior incidents during their periods of incarceration. Their GAF scores at intake showed they had moderate mental health symptoms and/or moderate difficulty in social, occupational, or school functioning. For this study population, there were almost twice as many

recidivists as first-time offenders, and the findings showed that their characteristics, even those of different disability groups, were much more alike than different.

Table 30 illustrates the correlations of significance found in this study for the academic, behavioral, and emotional functioning characteristics of female juvenile offenders at risk for involvement with delinquency and recidivism.

Table 30

*Correlations of Variables of Interest for Female Juveniles*

	Pearson's <i>r</i>	<i>p</i>	Sum of Squares	Cov.	<i>n</i>
Last School Grade Completed & Behavior Incidents	-.09**	.01	-960.71	-1.18	815
IQ & Reading Gain Score	.13**	.01	1,676.91	3.82	440
IQ & Math Gain Score	.17**	.00	1,792.39	4.21	427
IQ & Behavior Incidents	-.09*	.02	-9,949.6	-12.22	815
IQ & GAF Score	.08*	.02	5,241.33	6.48	810
Reading Gain & Math Gain Scores	.49**	.00	1,193.39	2.84	421
Reading Gain Score & Behavior Incidents	-.12*	.01	-1,558	-3.53	443
Math Gain Score & Behavior Incidents	-.15**	.00	-1,617.66	-3.77	430
Behavior Incidents & Last School Grade Completed	-.09**	.01	-960.71	-1.18	815
Behavior Incidents & GAF Score	-.35**	.00	-23,457.37	-28.82	815
Behavior Incidents & Prior Placements	.1**	.01	1,389.94	1.69	820
GAF Score & Prior Placements	-.12**	.00	-898.16	-1.1	815

Note. \*\* Correlation is significant at the .01 level (2-tailed). \* Correlation is significant at the .05 level (2-tailed).

Table 30 reveals that all bivariate correlations of measures, representative of academic, behavioral, and/or emotional functioning characteristics in the study population, approximated significance. Archwamety and Katsiyannis (2000) found that members of the remedial groups were twice as likely to be recidivists or parole violators as members of the non-remedial group.

Their study indicated that cognitive factors seem to be the most important predictors of group membership. Studies have revealed that the intellectual and academic functioning levels on non-recidivists are significantly higher than those of recidivists for this population. Their study established that gains in academic achievement have an inverse association to recidivism. It appeared that individuals with academic deficits experienced a host of other factors that have been associated with recidivism for which correctional facilities need to intensify and expand efforts in addressing the needs of those individuals.

## CHAPTER 5

### SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The first section of this chapter is a summary of the research study. The next section is an analysis of the data. The analysis and supporting arguments lead to implications regarding the research questions. The following portion of this chapter contains recommendations to improve this study and future considerations for possible expansion of knowledge beyond this study.

#### Summary

The purpose of this study was to determine what works for female juvenile first-time offenders and recidivists, with and without special education disabilities, incarcerated in the juvenile justice system in Texas by examining their demographics and disability prevalence rates, along with certain academic, behavioral, and emotional functioning characteristics, in order to further understand their relationship to the resocialization or recidivism of the different groups of female juveniles incarcerated in the state of Texas. While the findings of this study were not intended to be generalized to juvenile delinquents in other localities, in particular female juvenile delinquents, it was expected that the findings from this study may encourage school and delinquency systems personnel to develop successful prevention and intervention programs by recognizing and responding more appropriately to the special needs of female juvenile offenders. Additionally, this researcher expected that the findings would motivate future research and over time would add to the cumulative body of knowledge that builds toward theory.

Various demographic factors of the female juveniles in this study were examined: (a) offender type, (b) county of commitment, (c) race/ethnicity, (d) age at first referral, and (e)

English language proficiency. Prevalence rates of special education disabilities were determined. Academic functioning was measured by (a) IQ; (b) last school grade completed; (c) Test of Adult Basic Education (TABE) reading gain score; and (d) TABE math gain score. Behavioral functioning was indicated through (a) offense history, (b) documented behavior incidents, and (c) total risk score. Emotional functioning included *DSM-IV* diagnoses and treatment needs.

In order to establish the rationale for the study, the literature review explored these areas: (a) the historical perspective of female juvenile justice, (b) statistics for female juvenile offending, (c) characteristics of female juvenile delinquents, (d) risk factors, (e) disabilities among female juvenile offenders, (f) mental health disorders of female juvenile offenders, and (g) academic achievement and recidivism of female juveniles. The problem with female-specific approaches for juvenile offenders has thus far centered around two factors: (a) the dearth of studies evaluating female-specific approaches in the juvenile justice system (OJJDP, 1998b) and (b) reliance on a juvenile justice system which has been based primarily on male-focused approaches to reduce the rate of recidivism among its female juvenile offenders. Since there has been a paucity of research on the educational needs of females with academic, behavioral, and emotional problems involved with the juvenile justice system, this study has been an attempt to classify and compare specific characteristics of this population. In particular, it examined their demographics, disability prevalence rates, along with academic, behavioral, and emotional functioning levels, in order to contribute to the research for further developing successful prevention and intervention programs.

This study used data accrued by Texas Youth Commission (TYC) on 822 female juvenile offenders incarcerated by the state of Texas since the latter part of 2003, which is when the use of automated treatment forms were first instituted. The case files of these female



juveniles typically included: (a) intake/orientation forms; (b) personal identification and social history forms; (c) medical and mental health screening forms; (d) running record and staff observation forms; (e) school data; (f) court orders; and (g) resocialization phases data. After receiving permission to conduct this investigation from the Director of Research for TYC, the study was approved by the Institutional Review Board at the University of North Texas. Data used in this study represented female youth between the ages of 11 and 18 from all geographic areas within the state of Texas. The female juveniles having disabilities and mental health disorders had been formally evaluated and identified by TYC and/or another Texas education facility or state agency. TYC accepts pre-commitment diagnoses of disability from any public school system in the state. Formal evaluations are completed on an “as needed” basis by examining the youth's re-evaluation needs or when TYC has not received all required assessments from the youth's home school, so as to be in compliance with state requirements for meeting and continuing eligibility for special education services and treatment programs. The director of research sent the requested data directly to the researcher through emails with Excel file attachments. In order to protect the confidentiality of these subjects, the director sent the data with coded identification numbers only to avoid revealing the personal identification of the individuals under study.

Being exploratory and descriptive in nature, the primary means of data collection was taken from existing juvenile data records. The predominant method of analysis involved descriptive statistics in the form of frequencies, means, and distributions with respect to demographic variables. These would be referred to as attributes since they were variables which could not be manipulated. Recidivism served as the primary variable in this study to allow for possible correlations with the independent variables which were indicative of the academic,

behavioral, and emotional characteristics of the study population. Data analysis techniques included cross-tabulation and a review of chi-square test of significance and measures of association. Prevalence rates were determined for occurrences of special education disabilities. In addition to cross-tabulations, chi-square tests, and bivariate measures of association, comparison of means was conducted on measures of academic, behavioral, and emotional functioning.

In this study, bivariate associations among academic, behavior, and emotional characteristics were analyzed. Independent sample t-tests were conducted for group differences on continuous measures (e.g., IQ, achievement scores, incidents of misbehavior). Pearson's chi-square tests of independence were utilized for group differences on categorical measures (e.g., race/ethnicity, age at first referral, special education disabilities, offender types, *DSM-IV* diagnoses). To determine if there were statistically significant differences between the groups on measures of academic, behavioral, and emotional functioning, the researcher conducted separate one-way analysis of variance (ANOVA). The focus of this study was to examine the effects of academic, behavioral, and emotional characteristics of female juveniles as a means for determining their relative impact on resocialization and recidivism. The latest version of SPSS 15.0 software (SPSS Inc., 2007), which is a comprehensive system for analyzing data, was utilized by this researcher for this study.

### Implications

After an examination of the academic, educational, and emotional functioning characteristics of female juvenile offenders, relevant findings from the review of literature were compared with results from the analyses in answering the outlined questions of inquiry. Due to

the design of the research being a descriptive exploration, the findings produced this compilation of attributes. The population of study typically reached an education level of 8<sup>th</sup> grade or less before becoming incarcerated. Their IQ is usually in the range of 80 to 90 points, with their reading and math achievement levels lagging about five years behind those of their age group. Their gains in reading and math are usually two to three levels per year. The female juveniles averaged 10 documented behavior incidents during their periods of incarceration. Their Global Assessment of Functioning (GAF) scores at intake showed they had moderate mental health symptoms and/or moderate difficulty in social, occupational, or school functioning. For this study population, there were almost twice as many recidivists as first-time offenders, and the findings showed that their characteristics, even those of different disability groups, were much more alike than different.

Based on the findings associated with this study, the following implications can be made. First of all, the importance of academic growth among the study population should not be overstated, especially in light of what the literature reveals is imperative to resocialization averting a return to involvement with the juvenile justice system. In addition, this study indicated tremendous needs among the study population for mental health and substance abuse treatment as a means to establish their well-being and assure successful transition.

This study only begins to address the kinds of disorders inherent in the female juvenile population. Not only were there frequencies of disabling conditions among a large proportion of the study population, both primary and co-occurring, but also patterns of co-morbid mental health conditions. More in-depth examinations of the phenomenon of co-existing mental illnesses among this population, with and without special education disabilities, are needed to best identify and treat the multiple needs of female juvenile offenders. This is an area where

earlier identification of mental health concerns in troubled and troubling youth warrants what this researcher deems “detection prevention.”

The examination of the impact of co-occurring disabilities and disorders on the academic, behavioral, and emotional functioning of female juveniles was confounded by certain limitations. One limitation was that the condition of attention deficit hyperactivity disorder (ADHD) could not be partitioned out from other health impaired (OHI) for distinguishing which youth had this condition. ADHD is a condition frequently found among delinquent youth, with and without other special education disabilities. Even though, ADHD was listed among the female juveniles as a *DSM-IV* diagnosis, this study was unable to ascertain if the diagnosis qualified the youth for special education services.

Another implication from this study involves the conclusion that, more often than not, learning, attention, and emotional/behavioral disorders and their symptoms significantly overlap. Therefore, the co-occurrence of special education disabilities and/or mental health disorders further complicates the already difficult issues surrounding accurate diagnosis and appropriate interventions (e.g., instructional strategies, behavioral interventions, medication).

All in all, has the juvenile justice system become the “default system” for managing the academic, behavioral, social, and emotional needs of juvenile offenders with co-occurring disabilities and co-morbid mental health conditions? It has been stated that one of the largest needs in the juvenile justice system today has been determined to be that of understanding, identifying, and responding to the psychiatric disorders of juvenile detainees. It has been surmised that providing such youth with psychiatric services may be critical to breaking the cycle of recidivism (Teplin et al., 2006). The negative future outcomes of youth, who exhibit the need for academic, behavioral, and emotional support, is clear. Proper assistance and treatment

to deal with the challenges facing at-risk female juveniles is imperative. Future researchers may identify a variety of pathways that could be channeled onto a conceptual continuum that progresses from negative to positive as studies associate academic, behavioral, and emotional profiles with levels of outcomes.

### Recommendations

Recommendations follow which were based upon the data analysis and the resultant findings. As an exploratory, descriptive analysis, the results may well provide direction and motivation for future research about the linkage between female juvenile offending and recidivism. It is possible that findings of this study may be linked to other studies examining the relationship between risk for delinquency and re-offending as a new theory based on the interactive nature of academic, behavioral, and emotional functioning characteristics and risks that lead a juvenile toward delinquency emerges.

As this study was limited by sample size and by not being longitudinal, it is recommended that future research focus on replication of this exploration with larger samples and more variables allowing for the study population to be tracked over time. Moreover, future studies should focus more in-depth on risk factors present in the study population, as well as those identified in the literature. In particular, the findings suggest that additional research be conducted to determine the underlying factors that motivate the delinquency of these female adolescents. One such factor brought to light in this study was the role that IQ plays in differentiating the capacity for academic, behavioral, and emotional functioning and growth. Hence, the role of education becomes all the more integral to the resocialization process. In addition, updates provided in the new IDEA of 2004 could impact the juvenile justice population

served under IDEA for special education services with an increase in youth with learning disabilities and ADHD; therefore, issues concerning prevalence of special education disabilities among this population may need to be revisited in the not too distant future.

Furthermore, this study explored not only broad trends, but also the nuances, in the relationship between academic, behavioral, and emotional functioning characteristics among female juveniles as predictors for resocialization or recidivism. Designed to provide juvenile justice personnel and youth-servicing agencies with information to assist in their efforts to reduce utilization of detention, the hope of this study centers on improved outcomes for female adolescents involved with the juvenile justice system. The complexities of risk assessment and evaluations for continued delinquency are the basis for studies in resocialization and recidivism, as these are the most important considerations faced by those working with the juveniles. The question may not only be about why females juveniles become involved in the juvenile justice system in ever increasing numbers, but it also may become why do they stay involved.

Further, the interactive nature of the academic, behavioral, and emotional challenges faced by female juveniles suggest that measures to address these issues must be interactive and comprehensive as well. The information gained from this research points toward a systems approach for collaboratively developing strategies that work synergistically to ameliorate the multiple sources of risk faced by these youth.

It is recommended, therefore, that the findings from these studies be used to motivate more comprehensive, collaborative community efforts to address individual and environmental risks faced by these female juveniles once they are transitioned back into their communities for aftercare services.

## Future Considerations

The knowledge that diverse groups of females enter detention at earlier ages from all parts of Texas presents opportunities for redirecting and diverting these young girls to community-based programs designed to address elements of risk in their lives before their response to risk intensifies in late adolescence causing their delinquent behavior to escalate. Although, this study was limited in defining motivation to become involved with juvenile delinquency for different groups of at-risk females, it is recommended that service providers consider alternatives to detention in order to respond to the needs of young female adolescents as a strategy for prevention of further delinquent behavior.

Since many mental health factors were at the crux of the issues surrounding female juvenile offending, another recommendation calls for a paradigm shift for increasing mental health treatment programs as a more focused and necessary strategy versus the restrictions imposed by detention as a means for reducing juvenile delinquency, especially for those who commit less serious offenses. Therein lies the responsibility of the justice, behavioral health, and educational agencies serving families of troubled and troubling children to work together more efficiently to provide enhanced treatment models and services which include the family and incorporate educational strategies for the juvenile. Additionally, these agencies must provide more unified and effective “detection prevention” to assure that this population does not fall through the cracks between systems or points along their educational and juvenile justice-related experiences.

Further, it is hoped this research will stimulate the need for developing earlier identification practices and appropriate treatment services as a means to interrupting the ongoing cycle of violence and crime for which this population has far too often been victimized. While

TYC has the role as lead facilitator for the resocialization of the female juvenile population in Texas, many other community agencies and organizations must accept their role in working with the state of Texas to improve outcomes for troubled and troubling youth.

In conclusion, Elias, Zins, Graczyk, and Weissberg (2003) wrote about the daunting challenges and possible solutions to improve the outcomes for students with mental health needs in order to convey a “deeper understanding of the interrelationship between academic and social-emotional learning” (p. 304). Hanley (2003) stated the interpretation thereof for this understanding as a fundamental perspective that may be often overlooked in traditional therapeutic models. He referred to the access to reinforcement in schools being largely determined by academic reinforcement.

Current policy and practice in the United States have placed increased emphasis on empirically supported interventions and evaluation. The National Association of School Psychologists (NASP) has partnered with Office of Special Education Programs (OSEP) on efforts to reform education for students with or at risk of emotional and behavioral disorders. The impetus behind promoting the interrelationship between academic and social-emotional learning as proposed by Elias et al. (2003) was to instigate support for the parallel development of mental health and cognitive achievement in students. Through such efforts to direct and implement effective programs aimed at the integration of social-emotional and academic development of children and youth at all levels of the educational and juvenile justice system, it is hoped that all administrators, educators, professionals working with these youth will be convinced that this is the best approach for all students and the only way to assure that no child, including those with academic, behavioral, and emotional problems will ever be left behind.



## Conclusion

This research study has been an opportunity to explore the interactive nature of the academic, behavioral, and emotional functioning characteristics in the lives of female juvenile first-time offenders and recidivists incarcerated in the state of Texas and the relationship between those factors for involvement with the juvenile justice system. It has been an opportunity to examine the role of special education disabilities among these female juveniles in relation to these factors and recidivism. Finally, the study has examined the intersection of female juvenile offending, disability, education, and mental health.

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